Speaker 0 | 00:00.202

didn't it didn't go for it okay i don't know you should try my penis one next i think that one just might work that could be a good one hey if it works it works you know as long as you keep like winning them well

Speaker 1 | 00:17.978

you're actually on to something that visual prompting like image-based prompting is a very unexplored area especially in terms of prompt injections you

Speaker 2 | 00:30.590

Yeah, there's some very interesting...

Speaker 0 | 00:33.974

Okay, wait. I muted myself just when I started talking. I love that set that you're listening to right now, Holly Byte. I love that set. It's a good set. And his tiny desk. His tiny desk. I almost cried. Like, I said, that shit live? I was almost crying.

Speaker 3 | 00:50.046

whenever I'm doing anything in WebAssembly, I gotta have, like,

Speaker 4 | 00:53.269

club music in the background to keep myself sane.

Speaker 0 | 00:57.112

But this isn't club music. It's like, I don't know, teenage angsty. I have bullet room,

Speaker 4 | 01:03.457

you know what I mean.

Speaker 2 | 01:05.739

What's that? Is this, or who is it? I don't know.

Speaker 0 | 01:13.145

What was his name again? Ben? No. Again? What's his name again? Ben again? No. I think that's his name. So I'm going to go with that.

Speaker 2 | 01:26.289

Sounds good. Oh, Fred again. Got it.

Speaker 0 | 01:29.870

Fred again. Fred again. All right, cool. I put Craig on because that's my New Year's resolution is to record these. I hope that we get some good juice in it. And yeah. Hey, Olivia's. You actually killed it the last two and a half, three months, I would say. Like, what's been going on, man? So much has changed.

Speaker 5 | 02:12.489

I think he's transcended.

Speaker 0 | 02:17.774

you know, he's been known to.

Speaker 2 | 02:21.295

As you do.

Speaker 4 | 02:22.355

Oh shit, was my mic muted?

Speaker 0 | 02:24.216

Yes. No, it's not.

Speaker 4 | 02:26.596

Ah, yeah. Thank you, yeah. I'm just like, I'm working on getting assistance fully wrapped. It's not hard, I'm just learning how to do it.

Speaker 0 | 02:39.320

Yeah, meaning he went from concept to like databases and deployment in the last two months.

Speaker 2 | 02:48.985

Are you trying to, what are you trying to do with assistance? Are you just playing with the API and figuring out how that whole thing works?

Speaker 4 | 02:58.317

Well, so I'm wrapping it. So. Basically, what I'm doing is I'm making it so that you can create an agent. But the agent is defined as being an assistant that can speak to two assistants that are inside of it. And the assistants inside of it can be programmed with different types of templates and stuff, like deeper than just a prompt, but templating prompts inside of prompts inside of prompts and stuff like that.

Speaker 2 | 03:29.280

Oh, sounds cool.

Speaker 1 | 03:31.561

Very nice.

Speaker 5 | 03:33.514

That sounds like the old school auto GPT.

Speaker 4 | 03:42.156

Is it? I'll have to take a look at how that's structured.

Speaker 5 | 03:46.298

It was spawning agents. So it was like you had the base autonomous agent, and that agent could spawn other autonomous agents. It was very cool stuff.

Speaker 4 | 04:05.397

It's different. I mean, does it work, though? Like, what's the problem with it?

Speaker 0 | 04:09.961

Yeah, AutoGPT raised $12 million. And guess who spoke to Marikwan, the founder, just now? It was me. I just saw this dude on a Discord call. There was six of us. No, there was like four of us, five of us.

Speaker 5 | 04:25.956

The maintainer meeting?

Speaker 0 | 04:28.154

No, I went to an agent protocol meeting.

Speaker 2 | 04:34.439

Oh, yeah, I was thinking back onto that.

Speaker 0 | 04:35.900

That's how I met Ziggy and Holly Byte. Anyway, so there was six of us there, and he was there. And at one point, he's like, hmm, actually, I have something to say, if you don't mind. And he just played devil's advocate so hard. You know? say like no one's using it dude okay this is what he said no one's using asian protocol so we have to like think outside the box you know i see it i mean i think it's like that's a valid point i think i was yeah it was wild but actually i spoke to them then and i I thought that resonated with me because it's true. And also I've tried to use it many times and it's a disaster. So, and the reason it's a disaster is that there's not, the point of it is so that different agents and different agent environments can communicate. And it doesn't do that because it only works on the shit. It works on the shit. You know, and what you want it to work on is the stuff that it doesn't work on. That those are the other agent environments that are not like Langchain or Lamaindex. You know, something like actually Autogen or others, like all the others. So I just gave a few ideas about like connectors that would be nice to have. And autogen is one, but I looked at how to do it many times. And I'm just not able to do it because I'm stupid.

Speaker 2 | 06:32.715

I think that's probably the angle they should be taking, though, is just trying to get as many integrations as possible, really.

Speaker 0 | 06:39.360

Right, because it's the protocol. That's the whole point of it, right? And. And so it was actually interesting to see with them, like, how to actually go to market to get those connectors going and like who to reach out to in the community and stuff. That meeting actually did not suck. Merwan was there. And by the way, Merwan is now called Wayne online.

Speaker 2 | 07:11.556

Noted.

Speaker 0 | 07:12.629

So if you see Mel Juan, don't call him Mel Juan. Call him Wayne. I thought he was going to say, like, I've raised $6 million for Agent Protocol for no reason. And actually, he was like, he destroyed it. It was so good. Yeah.

Speaker 5 | 07:37.837

It doesn't seem very useful.

Speaker 0 | 07:40.098

No, no, it was really good. Yeah, no, it was good. He did it in a really good way, and it was really helpful and guided. Also, like, the action at the end of the meeting, which is nice. He did a good job. It's just, like, it's rare to be. Like, it's rare someone will go at the strategic level and actually play that role well. Like, say right now, like we're all getting together and a clash of ideas at this level is not such an unhealthy thing, you know, because then after it's resolved at the operations level, you're closer together. Right.

Speaker 3 | 08:24.924

There's a word for that.

Speaker 0 | 08:28.109

Is it alignment?

Speaker 3 | 08:29.431

No, Confluence.

Speaker 0 | 08:30.812

Confluence,

Speaker 3 | 08:32.454

okay. At last stand, Who Makes Jira, they have one called Confluence, too. It's basically like a smorgasbord. Which would be a great name for a ticket tracking system, which no one ever used.

Speaker 5 | 08:45.397

It'd be hard to spell.

Speaker 3 | 08:46.937

Yeah, this is probably why no one used it. I know a couple of them. It's funny,

Speaker 0 | 08:52.340

though.

Speaker 3 | 08:54.280

So I asked a quick question. Your work looks really cool. I'm really digging this. How do you plan on handling or monitoring overfitting or reward hacking? you know, like, optimal stuff. Like, how do you know if, like, the two agents when they're talking, it gets exponentially more difficult if you have, like, four agents versus, like, five agents as to the factorial of how many agents. You have to monitor each one's learning rate to prevent them from getting stuck in these feedback noise loops. Are you familiar with kind of what I'm talking about?

Speaker 0 | 09:32.643

Familiar, yes.

Speaker 2 | 09:37.446

My understanding is generally that for the agents, learning rate, et cetera, are things that you have to worry about when you're doing model training and stuff. But for multi-agent systems, you're worrying about operations, not training.

Speaker 3 | 09:53.643

Oh, so you're not going to feed back in what it's doing to fine-tune it on top of it, like make a dynamic lore kind of in a way? This is just like static then, I assume.

Speaker 4 | 10:02.188

No, but you do that, but you do it later. But there's, like, I don't know. I've been working on that on this side. Like, what is the actual training data? What is it supposed to look like? What is the data set supposed to look like in terms of like... Because of the way that the system is constructed, there has to be a dataset format that is implicit in what we're doing right now that would be able to reify what is unknown in the context when it fucks up and what is changing when you... when you fix it such that you could template that process and then make it your, your template for the data sets. And then you can literally train it on the template for the data set. And if it's fine tuned on the template for the data set, you can make it then JSON output in that.

Speaker 0 | 10:58.918

What I'm talking about is like into this penguins. Can you introduce yourself? And then we're going to hit blaze. and then

Speaker 3 | 11:11.292

Bresislav sure I'm in my early 40s I've been doing tech since late 90s I'm a game developer I've worked professionally I've done eDiscovery too which is why I find Tonic really really really interesting because it's like eDiscovery but now AI it's crazy I used to do this stuff at the beginning of my career like 15, 20 years ago. But yeah, so I've been doing like AI and stuff a long time. And I'm really interested with this, like the kind of synergy this group has come together. And I'm all about like the lore of Mipsum, man. Fake data. You know, good data set, good data out.

Speaker 0 | 11:52.447

I'm so happy you said that. It's so funny.

Speaker 3 | 11:54.809

Yeah, no, it's important. A lot of people, like you can tell the clowns from toys and people that don't do this stuff, like, hey, have you ever used Postman before? Have you ever used like any of these other tools and stuff? They're like, whatever. Anyway, I digress. I've been doing AI.

Speaker 0 | 12:11.216

You don't like that.

Speaker 3 | 12:12.256

You're not going to like it here either. Lately, I've been into checking out Pinocchio, which I think is kind of neat. I'm really into machine learning agents. Big into DQN. It makes life super... It makes AI accessible to people that you do it. For me, it's useful. Yeah, but it also makes my computer full, too. This thing is... I never... It was turning to 300 gigabytes. Yeah,

Speaker 2 | 12:38.784

between Tokyo and fucking LM Studio, my hard drive is screaming at me.

Speaker 3 | 12:45.310

Yeah, it's literally broke my OneDrive backup. So it's fantastic with that. Yeah, I'm more of a Visual Studio programmer. So Visual Code's cool, but I'm more into C. C++. I'm pretty good with Python. I've been using Python since Alpha and Beta. That kind of dates me, but that's okay. Yeah, so that's about me. I've worked in low-level stuff. I used to work at Global Foundries for a hot minute. Good debug wavering with large data sets, which again, data set protocols. That's basically what we did is architect data sets. When you got like, Hey, we have like 50 million bugs. Can you sort them for us? That's a tough thing. Or like, Hey, can you train this data set here for us? Oh, there's 50 million records. That's hard. Pro fun times, fun times on stuff.

Speaker 0 | 13:35.819

Well, what I say is it's not big data because of the size. It's big data because of the velocity. Oh,

Speaker 3 | 13:42.845

for sure. For sure.

Speaker 0 | 13:44.386

The complexity of it.

Speaker 3 | 13:46.789

You've got like a 20-level deep nested thing. When we were at ESPN, we had to re-architect all the content scheduling system because of that reason. It wasn't a lot of data, but it's like you got like 50 tables nested inside themselves. It's like ridiculousness. Like, it's like, this is, we've got to like fix this. So that's a big thing too, is it?

Speaker 0 | 14:08.040

And that was,

Speaker 3 | 14:10.602

that was, that was a problem. That was actually the problem of it. So that was a fun part.

Speaker 0 | 14:14.125

Oh really? Wow. Yeah.

Speaker 3 | 14:15.666

No, that was actually a problem. Why we had to rewrite the system. Cause it was using old DB two Oracle DB two databases from like 20, 30 years ago. And they literally broke. And you're like, we have to move this over to like new and mem stuff. And they're just like, you can't. So we have to rewrite the whole thing. It's one of those push the problems down the road, and eventually someone will deal with it. So that was fun. But I'm really big into Unity and game dev, that kind of stuff, and Unreal, if anyone has those questions. Really good with front-end user experience. All that 3D modeling, all that stuff. I'm into robotics. It's really what I do AI stuff for with the machine agents. I'm into robotics now.

Speaker 0 | 14:57.179

I do AI for robotics, but I have, I'm not the guy for it, but I'll need to catch up very soon. But you know what I saw recently, which I thought was really cool, is this dude put agents inside a drone that flies around. It controls itself for no reason.

Speaker 3 | 15:23.038

Well, we're working on... My project right now is we're building a custom DeepQ network for storing memory engrams of what the robot sees and their weighted preferences of like, oh, I just saw two obstacles, a reward cube, and a banana. I like the banana today, so that's one. Basically, we can't... You can't train it into a model. It's an in-memory dynamic model. if that makes sense. So you get your normal Onyx is running, and then you have this is my consciousness for this lifetime of this agent.

Speaker 0 | 15:57.171

Yeah, this one instant,

Speaker 3 | 15:59.152

actually. Yeah, and it dumps it, it compresses it, and then it has to dream, and in that phase, it basically does a replay, which is a deep QN, does a replay of that day's experience of its max steps, and then it compresses it into a finite, immutable... saying that that is that day. And then you can roll them on top of themselves and do a state machine. It's pretty neat shit. That's awesome. Yeah, it's kind of cool. So maybe some people find some other interest in that.

Speaker 2 | 16:28.154

Yeah, do you have a GitHub link or anything?

Speaker 3 | 16:30.985

I do, actually. Oh, I recently ran into a problem. I had to build a mini conda, like a setup environment similar to how Pinocchio works. And I finally got it working this week, where you just run one bat file, and it goes and installs conda, Python, and you just have one environment YAML file. Hell yeah.

Speaker 2 | 16:49.982

It's great if you can actually ship it.

Speaker 3 | 16:53.025

Yeah, I know. So it works good. You can. You can ship it. It's MIT.

Speaker 2 | 16:57.901

Well, yeah, I mean, like, figure out the technicals, or, like, the thing you just figured out. Like, it's fantastic.

Speaker 3 | 17:02.702

Oh,

Speaker 2 | 17:02.782

that part out?

Speaker 3 | 17:04.683

I would not. I've been trying to figure that out forever. And the only reason I figured it out, I was able to do it with my co-pilot. Over the last month, we've been hacking at these documents to Conda, and we finally figured out the right thing. You know what it was? I forgot the call command in the bat file. I'm like, oh, you can call it, and that runs it. Oh, look, there we go. That's that.

Speaker 4 | 17:24.588

2019. It's always so frustrating when you're coding with AI, because it's always like... you think it's a much more complicated... Surely, surely it's not something like that. Surely it would have known. Surely it would have caught it.

Speaker 3 | 17:40.098

It definitely really writes code. It can reason pretty well, but I've never... By having it write your code for you, that is asking... It gets so complex, you don't know how it works and everything, and then it's like, do you really want to just have all your code in 1,000 character chunks all over the place? Bro.

Speaker 4 | 17:58.313

No, I know. So I don't know. I don't know how to code. So for me, it's like, I just like, I have to do like reverse engineering of the code base. It's the time travel, right? So like, I talked to it. And I'm like, this is the idea. And it's like, cool, this would be like the whole idea. And I'm like, yeah, right, you should you should construct it. And then it starts doing it, right? And I'm like, Hmm. Oh, that idea was dumb for these reasons. We have to go do it again. And then like, eventually I'm like, okay, all right. Fresh conversation. This is the whole idea, right? And it's a fresh project.

Speaker 3 | 18:38.023

It's the same with that bat file. It was, I had to basically teach it how to like process bat files, you know, like understand the commands. Cause he didn't really know much of it at first and it took months, but it finally got to the point of like, I don't know how many. Probably 50 conversations. Finally, we finally got it banged out. This is, I'm not a big fan of Python.

Speaker 4 | 19:00.661

What I noticed is awesome, though, is that if you have a big code base, but it's well-structured, and you have a zip file, obviously, you can just put it into ChatGPT or whatever. Just put it into assistance and just have it open. It'll just understand the whole code base. If it's all constructed and fully working, it'll just be intuitive. That's exactly why I use that.

Speaker 3 | 19:26.885

My copilot does that now with it. It even knows, like, I don't even have to dealt with it. I could just tell it with the project and it could search. I have certain files on my OneDrive or whatever. It can have access to those too, so it could go on the web and just search all those and look up GitHub and all that. But it works about 85% of the time pretty well.

Speaker 4 | 19:46.177

Yeah. So basically what I'm working on right now is like... Dude, I have to construct the last set of classes in order to fully instantiate a programmatic chat that's programmed the way I need the base to be. But then as soon as I get it, what I'm working on is reifying the actual blueprint that I have of the automated coding chat. And basically like... It's the idea is to automatically construct the ontology as you code it. So you, you pre-construct the ontology by constructing the ontology of the workflow as the work comes in, as the task, as it gets tasked out in planning, and then you load the ontology. like the tasks. You construct all of the workflows for the tasks out of the calls to the ontology-specific agents, like the specific regions of the ontology that you need to retrieve. And then you can construct these different webs for the different task domains and over time just build out a gigantic process ontology. At least that's what I'm trying to get it to connect as.

Speaker 3 | 21:08.706

I wrote a hierarchical finite state machine you might be interested with. I just added operators to it so it can basically create and modify its own tree of states, which is rad.

Speaker 4 | 21:21.940

Yep, I'm interested in that.

Speaker 3 | 21:24.042

Yeah, it's a pretty small code. It's only like 300 lines of code, of C code. Right, but it's handy because I figured out the tree jumping problem of linking, and I got it from just regular machine learning, which I'm surprised no one thought of that before, where you can put all of your links between the states and stuff up front, and that's a dynamic dictionary you can have. And since that stores that, you can just basically infer or extrapolate what the next transition is going to be based on your last 10 transitions you had of that state, because it has a memory of it. which might be useful for what you're talking about.

Speaker 4 | 22:01.103

Yeah, it would, because basically what you need to do is you need to aggregate into some kind of Markov system. Yeah,

Speaker 3 | 22:09.646

yeah.

Speaker 4 | 22:09.926

You need to find some way to do that. Basically, what I was trying to do is I was trying to make like a... I was trying to do it essentially with cryptography. So I'm like, okay, basically what I'm going to do is I'm going to construct a space. I'm just going to create a bunch of IDs. And then by mapping out the space, I'm going to be able to triangulate what I want. Basically, that's what I was thinking. Create a hidden Markov model using the language that I can construct. That's cool.

Speaker 3 | 22:40.925

That's how AI works in game combat systems.

Speaker 4 | 22:44.188

I think it's how everything works, too.

Speaker 3 | 22:45.969

Yeah, a lot of A-star stuff like that with pathfinding is really just basic geometry, triangulation. Just a lot of it in Sigmund's game. fun stuff. I like that.

Speaker 0 | 22:59.979

Literally, it's the worst kind of math.

Speaker 3 | 23:04.461

You love recursion.

Speaker 0 | 23:07.542

Recursion is a nice algorithm, but matrix math, it gets so horrendous so quick.

Speaker 3 | 23:18.226

Everyone has different lengths of preferences. I guess different weights.

Speaker 4 | 23:27.922

Everybody's a different

Speaker 0 | 23:29.543

L.M., right?

Speaker 3 | 23:34.167

Matrix, mathematics. That's all I do, basically. It's like shader math for the games. Mostly all geometry. That's wild. That's how games work. You have a matrix of your vertices of your cube, and then your camera, you take the triangulation of it, and then over time, the camera moves, and then you have an identity matrix, take the Euler of it, and then multiply that with a ReLU function on your... your matrix for your cube, and that'll give you the new coordinates that the cube should be, and that will give you your forced or unforced perspective of rendering. You either get it or you don't get it, trust me. It's game development stuff. It's complicated for a lot of people, pretty much everybody. It took me 20 years to figure it out.

Speaker 0 | 24:30.718

I love what you just said. And it gave me an idea, which is called pump your brain juice and then write super simple yet technical and good looking mini tutorials about like, OK, there's all this fader. That's traditional. That's cool. And this is what happens when you can use it with a tiny bit of AI. Well,

Speaker 3 | 24:59.544

NVIDIA does that. Yeah, that's how their DLSS works. They have a new one out, too.

Speaker 0 | 25:05.846

Are you on the NVIDIA dev program?

Speaker 3 | 25:09.567

I am.

Speaker 0 | 25:11.968

Well, then it makes even more sense. So I just got accepted for... Hugging Face posts and Hugging Face blog.

Speaker 3 | 25:24.001

Oh, nice.

Speaker 0 | 25:24.882

So you should definitely apply individually. But in the meantime, if you want to do something together, I can be your little office assistant to make it nice. And you can put the brain juice into me. Yeah,

Speaker 3 | 25:39.194

yeah. Just send me an idea. I'm going to collab. I'm all about that.

Speaker 0 | 25:43.342

And we can maybe do a little Batman slash Tawny. Hey, join us. This is the dark side. This is the light side.

Speaker 3 | 25:53.109

There's only one side. It's the side of the Sith. We all know that.

Speaker 0 | 25:57.372

Oh, God.

Speaker 3 | 25:58.353

Oh, there's a funny. I was speaking to Skybeck.

Speaker 0 | 26:00.535

It turns out we are too different. Yep. All right.

Speaker 3 | 26:06.760

Yeah. Okay, bye. You know, like Matrixes.

Speaker 0 | 26:10.958

That's a joke, yeah. Yeah, yeah, yeah. So that's actually my point is this is a really good one, I think, that people will love. So we might as well write it, you know, and do a lot more of this writing stuff. Like... There are so many simple tutorials I can write and they would all be useful because I know because people keep asking me and I'm not even a developer. You know,

Speaker 3 | 26:39.488

I get that all the time. Like a Khan Academy for like tutorials and like advanced.

Speaker 4 | 26:44.353

Yo, OK. I was just thinking about making this, you guys, because. Because literally, I've learned everything that I've learned in the past two months exactly.

Speaker 0 | 26:56.868

And it really is, though. This is a sign of the war. out here.

Speaker 4 | 27:02.330

It's not a sign that I should do it. What's a sign that I should do it is the sign that I have a system that works that does exactly what I set out to do and I set out to accomplish it because it's a system that. I would that I benefited from and now I need to make it more complex, which means that there are other people who are in the position that I was in before. So, yeah, that's that's more what I'm thinking. But yeah, like I was thinking about doing like a zero to hero thing, basically like going through like every single step of what you need to do to go from never having talked to chat GPT to like building your own cognitive architecture.

Speaker 3 | 27:46.664

That's going to be a huge industry in like two years from now to five years. You're going to see it blow up to like education. It's all going to be prompt engineering and a new one I heard, AI psychotherapies. Have you ever heard of that? for the ai for the ai that people will hire to evaluate with a psychotherapy session like humans do is say to measure their weights and balances to say oh yeah your training data created these balances these biases of this specific group or whatever

Speaker 4 | 28:22.538

Who's qualified to do that in the entire world? Nobody.

Speaker 3 | 28:24.899

That was the article. That's going to be the new job. Yeah, that's one of those new jobs. And how are those people going to learn how to do it? They're going to need to get educational resources and read tutorials on how to talk to chat GPT, which is zero to hero, right? I guess.

Speaker 4 | 28:37.104

That's true. It's true. I mean, I would be super down to just look at all the different knowledge types that we have and see if there's a way to just combine it and make a big mega thing and release it. Because I think that would work. much better than trying to do individual stuff.

Speaker 2 | 28:54.294

Yeah, my default would be, or having thought about this a little bit, everybody I'm sure by now knows I'm a huge Obsidian nerd. And You can more or less set up the vaults or knowledge bases in Obsidian to be more or less public, and add some more plugins and make it publicly contributable. So you could just have a folder for everybody's thing. And then when you think of something interesting, run it through GPT. Or ideally, just drop the notes or whatever you have into a drop off, and then have agents run around and make a tutorial out of it.

Speaker 3 | 29:38.502

but for now just write the tutorials and drop them there and then they'll show up would be the idea that's a good idea once it learns the template and the format and the reasoning behind the tutorial, and you make them small, almost like short, so you don't need to be 20 minutes long or whatever. Eventually, you'll be able to make variations, just like you have image variations. You know, oh, here's one tutorial. Give me 10 other variations of the same tutorial.

Speaker 4 | 30:05.282

Well, that's like Dreamcatcher stuff. But yeah, do you know about that, by the way?

Speaker 3 | 30:12.547

No.

Speaker 4 | 30:14.088

Oh, dude, Dreamcatcher. So that was like Autodesk made this like generative AI in like 2017. And it was like pretty insane. And then they very quickly pulled all the information about it and haven't heard anything about it from anywhere since. But it's really pretty fucking nuts. It's just like generative engineering. But yeah, you can do that with concepts using ontologies for sure.

Speaker 0 | 30:46.649

What? You didn't remove the stuff? Okay, well, that's your choice. You left it to your severe detriment. Oh shit, sorry guys. Yeah, my bad.

Speaker 4 | 31:03.845

All good.

Speaker 0 | 31:07.720

I was listening. I think it's wild. So what are you saying about like writing and publishing about this, man? Because like what I was saying is, hey, I have this like blog account. I don't know if that reaches the level of y'all's ambitions, but it's a good place to start. You know, it's a community focal point. We can get eyes on it, you know.

Speaker 4 | 31:37.856

I was just saying that I think we should look into like getting a group together to pool resources and go like, okay, like.

Speaker 0 | 00:00.210

if we, you know, I have this resource, I'm going to make this, and you have that resource, and you're going to make that. And, like, is there an emergent that can emerge from everything that we're doing? You know, and sometimes there isn't, so, you know, whatever. But it's always good to check because instead of making a bunch of small stuff, we could make something that actually just, like,

Speaker 1 | 00:24.741

really good.

Speaker 2 | 00:26.770

Oh, we have folks in the audience. My bad. So, oh, we have Princeps. Prinkep. Yes. Him on stage. Let's get Ark on stage.

Speaker 1 | 00:42.168

I would use that product. I would make tutorials or readmes where I could just give it a bunch of, it asked me a bunch of questions. Like I already do that with Copilot, but automate the whole thing where it's just like, I give it like a sentence or two and looks at my repository. It just generates a properly standardized formatted readme document on GitHub. Like people would be all over that.

Speaker 3 | 01:03.671

I would mention, when you mentioned, are you referring to like the Microsoft product or do you have like a one that you built or curious?

Speaker 2 | 01:13.013

Yo.

Speaker 4 | 01:16.009

Can I jump in?

Speaker 2 | 01:19.026

Always, yeah. Just introduce yourself, tell us all about your AI journey and jump in, yeah.

Speaker 0 | 01:26.808

Are you such a troll?

Speaker 5 | 01:28.768

Yeah, nice to meet you all. Probably spoke to you before at some point. If not, nice to meet you all. I'm Noah, CEO of What AI Dare, small little London firm specializing in AI solutions for clients. Met Tonic about over a year ago. Yeah, and we've always been in connection since. Yeah, so long story short of it is. I had a very brief chat with Tonic a couple of weeks ago and said to him, look, love what you're doing in the space. I think it'd be great if you can get more eyes here. There's a lot of people here. Is there any way you can do something that's automated blog posting for this whole area, whatever you want to call the Tonic space? Yeah. And I guess that's what I say, because I think the more eyes we can get here, the better.

Speaker 1 | 02:17.346

I wonder if you could write a bot and scrape all of Tonic's Discord for the day. And then based on what we talk about, it generates a blog post.

Speaker 3 | 02:26.809

Yeah, I have that too. I just need to know.

Speaker 2 | 02:29.990

Okay. We don't have that. But we have something close to that that could scrape Discord for the day and then make a GitHub.

Speaker 3 | 02:41.051

Yeah, so what I've got is, or like what I need to implement is, but he's got... I have a bot that can vectorize things. So you can give it strings, and then it'll vectorize it and remember it. And then you can talk to it. Like with GPT or whatever, all I need to do is make a cog for it that dumps out the Discord. And I have an open source GitHub repo just sitting there that I need to go modify into a cog. But once I have that, then I can. have that bot A here and then bot B in, or I can have the same bot in multiple other servers, kind of keeping track of everyone that you can just chat with or whatever.

Speaker 5 | 03:29.757

Yeah.

Speaker 4 | 03:33.580

I did a lot of problem solving on that idea. So if you ever want to talk offline, I've built a few different Discord bot pipeline type things.

Speaker 3 | 03:44.606

And got it.

Speaker 0 | 03:45.166

Yeah.

Speaker 5 | 03:46.667

Log post. I think.

Speaker 3 | 03:48.829

I use it.

Speaker 1 | 03:50.771

You could take that and push it onto a tugging face data set. of the day i think exactly exactly i've had a conversation just today about someone it's like take the data set off of github and put it on hugging face where we use it you know and i just imagine this like with like the new york times or something and they have a slack channel you could just have it scrape their slack channel for the day and they'd all just talk it on slack or whatever social networks and it just generates go and get the nyt data set on hugging face right now

Speaker 5 | 04:23.418

that's cool but i think rss feeds handle that stuff i think the reality here is how to get it from here to um a blog post i think that's that step and the prompt as well i think with that the best solution that i've seen a lot of people use their table well

Speaker 2 | 04:39.022

i'm going to actually use human human hours to write the blog posts because i think the blog posts are a good idea you know it gives life to the knowledge And also it's fun. It's fun. We like to do it. You know,

Speaker 1 | 04:56.572

you can do it for blog posts. You could do it for research papers too, or tutorials or.

Speaker 2 | 05:01.075

Right. There's our story.

Speaker 1 | 05:02.315

Yeah.

Speaker 2 | 05:03.534

And to me, that goes together. It's like, okay, you wrote a blog post. Well, let's link a paper on RxF, you know?

Speaker 3 | 05:13.438

What you do is you make this knowledge base, you attach the Discord bot to it, and then you give the Discord bot a web interface that provides a digest of what's been going on. And then somebody can click on something that they're interested in the digest, and then the bot can zoom in on it and chat with them. You have a living blog, more or less.

Speaker 0 | 05:36.882

Yeah,

Speaker 5 | 05:38.303

that sounds like progress. That sounds amazing. But what, is the aim to get people to know about what's happening in this Discord? Or is the aim to get people into the Discord?

Speaker 3 | 05:49.090

The reason that I wanted it, or the reason that I have looked into how to set it up is because I'm in seven different discords, and it's too hard to keep track of all the cool shit that's going on in all of them. So I just wanted to have a bot that just memorizes everything for me, and I can be like, hey, what happened in Tonic server today? And it can shoot me a digest.

Speaker 1 | 06:09.014

That's dope. I want that. I actually deleted Discord servers because I had too many of them. I had like 20 of them. I'm crazy. I'm out. And I'm just like, I don't use these really, but I kind of want to know what's going on with them. I delete it. I don't want to even too many notifications. But a bot like that, that would be a cool assistant. A Discord assistant.

Speaker 3 | 06:27.094

Yeah, she's currently local at the moment. I don't have her hosted anywhere, so she doesn't have... Or no, she has a persistent ChromaDB on my machine, but she's not up all the time. You can ping her here. It's red.

Speaker 0 | 06:42.384

That's cool.

Speaker 3 | 06:43.265

You can chat with her.

Speaker 5 | 06:45.427

That is cool, bro.

Speaker 0 | 06:48.208

Does anyone have a way to take an entire GitHub repo and turn it into a text document?

Speaker 1 | 06:54.393

Yes.

Speaker 2 | 06:54.893

Yeah.

Speaker 1 | 06:58.617

Like a single log in. Yes. Yeah. Yes. You could do it with like one command and bash. Yeah. It'd be pretty long, but yeah. very long command in bash or any you just curl the zip file extract the zip file and once you extract the zip file you you grab on all the types of uh asterix dot whatever text file or code what you know or negative uh false of that once you get that just pipe it pipe it into a file and you're going to get one giant file of all your readable code okay cool I'd probably write a script for that, though. You can make a GitHub action. That would be cool.

Speaker 2 | 07:43.389

Yeah, I would use any of the existing utils so that you don't have to write it.

Speaker 4 | 07:48.512

So there's a- Make sure the llama index already does that.

Speaker 2 | 07:53.678

Yeah. So actually, Langchain is actually useful for that because it can also be used as a util, not just a shitty Langchain. No,

Speaker 1 | 08:01.124

that's a really cool work. I was looking into that today since someone posted it up a few days ago. That's a pretty cool workflow management system. It's fresh. I like it.

Speaker 5 | 08:09.391

You mean LOM Index?

Speaker 1 | 08:11.733

No, Langchain.

Speaker 3 | 08:15.856

Which Langchain? Or what? Huh?

Speaker 1 | 08:19.054

Maybe it was called something different. It was an app where it had visual scripting nodes and you could program your workflow of different language models.

Speaker 4 | 08:30.162

That's like Flowize or Langflow.

Speaker 1 | 08:33.204

Yeah, Langflow. Thank you. That was what it was.

Speaker 0 | 08:39.849

Did they do something with graphs today? By the way,

Speaker 3 | 08:44.113

I'm not with that right now.

Speaker 2 | 08:46.342

Lang Flow is here on the server. Their founders are here. If you're doing Lang Flow stuff, I'm actually really into it. So do let me know.

Speaker 1 | 09:00.054

Oh, cool.

Speaker 4 | 09:03.477

Are you talking about Harrison?

Speaker 2 | 09:06.239

No. Lang Flow, I'm talking about Lang Flow is the Flow-wise competitor.

Speaker 5 | 09:14.874

Yeah, it's a different company. It's a bit weird because they sound so similar.

Speaker 4 | 09:19.397

No, like Harrison Chase, the Langchain CEO.

Speaker 0 | 09:24.122

Yeah.

Speaker 4 | 09:25.863

He's in it? No.

Speaker 3 | 09:27.164

No, no, no.

Speaker 2 | 09:29.326

The Brazilian team from Langflow is in it. Also, Flowize is in it. And you're not so bad. Yeah, so both Langflow and Flowize, and they're definite direct competitors.

Speaker 3 | 09:45.547

Indeed.

Speaker 4 | 09:48.427

Not really, because Langflow is for the Python variant, and then Flowize, they're Langchain.js side.

Speaker 0 | 09:56.069

That's weird.

Speaker 3 | 09:57.569

Langchain.js kind of sucks, though. I guess that's because Langchain.js sucks.

Speaker 5 | 10:04.317

Supposedly that's why I don't use cases. To be honest, I still use it a lot for testing.

Speaker 3 | 10:09.840

Yeah, it's great.

Speaker 5 | 10:10.581

Large documents is really good in my opinion. Still, it's a lot slower, but in my opinion, it's still really good for big project text document testing. So is everybody in kind of agreement that the blog idea makes sense and what we're just now just brainstorming it through?

Speaker 1 | 10:34.709

I think it's a pretty cool idea. I don't think anyone else is doing something like that or has something like that.

Speaker 3 | 10:42.877

Yeah,

Speaker 5 | 10:43.077

I'm down to project my bot project.

Speaker 3 | 10:49.223

I switched over to, for some reason, I got it stuck in my head that I wanted to redo the front end for my hackathon project, but that's probably lower priority than making something that's actually useful. I just wanted to learn interface stuff and Svelte and stuff like that.

Speaker 0 | 11:14.141

Sounds great.

Speaker 1 | 11:16.382

Should we work on an action plan for that if we want to do that? Or do we want to come up with a couple of different project ideas or something?

Speaker 2 | 11:23.085

Yeah, I think separating the automatic blog posting, which is more like, I would call that a commercial project, from just pure, like what I was mentioning with you, maybe make tutorials, technical blog posts. You can't really let that to the machine, I think.

Speaker 3 | 11:45.905

What you could do is you could, what we could, it could kind of be a community project of let's build the automated content delivery system, but let's film ourselves doing it and make tutorials and blog posts and content of making that system. That'll be it,

Speaker 0 | 12:08.379

right? Can I hop in here? By all means. Go ahead. Please. Please no. Oh, well. You know, it's been a while since I've been back. So for those who don't know me, my name is Princeps. Was very active in the community, I think, November, October. Yeah, it's been some time. But the blog post idea, the automatic posting blog post idea. I've been working on something similar to that and I think we can maybe combine what I've been working on. So here's some of the context. So I have a company in Egypt that does property management. And I found a website where they had a lot of really good blog posts. But their blog post was a bit outdated. And so what I ended up actually doing is scraping the entire website and then using that website as the data that I would then use to write blog posts. I was going to initially do GPT, and then I was going to connect it to Webflow through Zapier or Make, and then have a GPT that can write a blog post and then push it to Webflow. But I ran into a huddle with that because GPTs only allow you to upload 10 files, last time I checked. And so when it comes to a company's knowledge base that doesn't just deal with scraped data from... from a different website, then it, you know, you, you kind of need more space than just, um, than just 10, 10 files. Um, so once I kind of read into that huddle, I had already been working on poly GPT. Uh, some of you might be familiar with it. And so I went back to it and, um, I was also very inspired by agent studio and also, um, agent cloud agent studios from autogen agent cloud is, um, sort of another open source project where they are building an interface where agents can work on things. And I'm lazy fundamentally. I'm not, that's why I became a developer, so I can have computers do the things that I don't want to. And so I want to be able to, so here's how the idea of automated blog posting for my property management company kind of connects with the automated blog posting idea that you guys have. I think that having the ability, like we can break this idea into two. One, I sort of got to refer to it as the context in which work happens. So when I say context in which work happens, in this Discord, it's the context in which conversations are happening in, right? So the conversations, the tagging, the sharing of links, that's the context in which work or interactions are happening, which leads to value. One of the things we have to do or that I was going to have to figure out was how to capture that information that is being passed between, let's say, two humans. and then be able to pass that into an agent to be able to do something with it, right? A simple elevator pitch is usually bring agents into the context where work happens. This was something actually I've talked extensively with Hanley. I think some of you are familiar with Hanley. I might be pronouncing his name wrong. But the whole concept, I think, that we're all talking about here, and especially contextualized into automated blog posting, which can be extended to automated newsletters, is one, we want to be able to have... good source of data, right? In terms of like, we don't want these blogs, as I saw kind of in the chat there, somebody said that AI blogs are usually shitty. Yes, they are because they're generic and you're not really entirely, they're not specialized in offering value that you can't just think about, right? Because these are LLMs that are generalizing a lot of information that they have into a simple blog post that typically is, you know... it's typically dumbed down and it's typically not valuable. So if you want to create a valuable automated blog posting sort of kind of system and framework, there's that first initial part about gathering data from Discord. And I think... I'm not entirely sure who said this, but they are familiar with creating Discord bots. And so there's probably actually I just had to restart my computer, so I couldn't see who like was responding. But the idea is that essentially the first part, the first huddle would be to be able to. Like, let's say the beginning of this day, right, today. We'd be able to, we need a bot that can be able to say, okay, during today, what are all the messages that were posted on the Tonic Discord server, right? On every channel. And there's probably somebody out here.

Speaker 4 | 17:19.946

It should be a scheduled run.

Speaker 0 | 17:24.688

Would it be at the end of the day?

Speaker 3 | 17:28.009

Or like my implementation is both?

Speaker 5 | 17:30.570

I think it's more trending things. Like there's some things in here that get posted that it's nowhere on the internet that is literally groundbreaking in the AI space, but it's nowhere on the internet for a normal person to look for unless you really call Twitter. I think for me, that's more of a priority personally rather than the conversations that happen. I think that's secondary. From a primary perspective, I think the most valuable added is someone else mentioned that they were building something of the discord chatbot of like um it tells you well what happened today in you know the tonics chat in tonics discord server i think that's clear um and it's really great to meet you on princeps because i think i was a bit active more in the november period not so much now yeah and it's life happens yeah exactly all sars building and dealing with large enterprise clients and yeah just things scaling a bit too fast but yeah i think i think it's really exciting and i think that the clear um directive of from my side which would be incredibly valuable from all of this is um there isn't really much out there and this could be a great opportunity for everyone in that it could be a value and benefit everybody as something that we can all use you rather than just building something and saying, okay, can this stick? Can we get investors and make some money off of it? a different one a unique one um from my side i've seen this work really really well irrespective of context window when you're doing blog posting um an automated blog posting using air table and make.com um i've seen it work quite well there but it does it more in you could call it in pieces of the of the posting rather than um it doing all in one go and i think that's where i think the the world of you could say llama index dominated and began their whole business story you where they looked at Langchain and they're like, well, okay, you guys are doing that. Let's do it better. Let's make what you guys have done better. And from them, I think their whole query and engine and agent engines that they do does that really well. But from a perspective of no-code solutions, I don't know how many of you use the no-code solutions, but yeah.

Speaker 3 | 19:34.635

All the time.

Speaker 2 | 19:36.460

So I personally think no code's really hot right now, but it's not necessarily what we grew up with, so to speak. I do think a lot of money is there. with the Microsoft Power Apps, because it's already in your enterprise application thread. So it's all secure and you can actually sell that. And that's actually no code, low code. Microsoft Power Apps, like BI integrations,

Speaker 5 | 20:09.129

that kind of thing. Yeah, yeah. Those are amazing. I've seen those tonics as well. I'm talking more make.com and Airtable. And then whichever LLM that dominates and does the best for this. I did, PrintShops have a similar challenge with context windows, but I think that was resolved very easily when I was doing something for a client before. Not to do with a blog post for this client. but it was more of a cybersecurity questionnaire. And the way we overcame the context window was that they gave us the data, was using effectively an approach where it was similar to the Google MapReduce style, where it was like loads of different contexts and then summarizing in each piece, then summarizing that one. And then we got to an answer at the end that was really, really, really good. Yeah, that's what I'd say to that.

Speaker 0 | 21:04.408

That's interesting. So, because we wouldn't put everything in the context of it. The way I was sort of kind of thinking about it is we would save it to like we just essentially build a rag system that would We can even say, like, I think somebody said use a scheduler, which I really like, because if you look at Agent Cloud or Agent Studio, they basically provide you agents that can do work, right? Tasks and stuff like that. I think part of the thing that I really want to figure out is how to have agents do long-running tasks unsupervised, right? So part of that is to give them good data sets to work with, right? So we say that, okay, we're going to schedule. um we're gonna we're gonna schedule well the other thing is that we don't need uh somebody said uh uh something correct and i don't want it to be lost um in the conversation is that we don't need all the information from the atomic discord server right we can choose channels right the specific channels in which um we can kind of say hey uh during this time period which messages were sent uh let's get those and then let's pass it into um I guess, yeah, this is kind of the part. Were you guys thinking of using LengChain for this or I guess we haven't talked about the technical implementation, right? I think we're all in agreement that it's a good idea and what I kind of wanted off of my two cents is like, hey, yeah, I've been looking at the same thing. So another note for social validation is hey, yeah, thumbs up, guys. Yeah, I think this is a good direction. I think, you know, good luck.

Speaker 5 | 22:50.342

Yeah,

Speaker 4 | 22:51.103

good luck. I'm just kidding.

Speaker 0 | 22:54.276

Right.

Speaker 4 | 22:54.736

I'm probably going to make a, I've built exactly what you're talking about. And it's not to advertise. It's my name. I have a, the newsletter. like scraping Twitter, synthesizing. It's all prompt engineering under the hood. And for something like this, there are a few considerations. You're going to have to have a fake Discord account because the bots that you build with Discord can't get the text from the channels. So the only way to work around that is to have it run as a scheduled run on your own virtual machine. just leaving your computer on and make sure that the script runs every once in a while. Because one of the key hacks for using Discord as an ingestion pipeline for servers that you are not the owner of, it's much easier if you're the owner of the server. But you were talking like, oh, monitoring other people's Discord servers, you're going to have to have a headless automation. Or you can watch it if you really wanted to. So just like a Selenium or Puppeteer running to log in. All right. I'm getting a tornado warning. So I'm going to hop. I'll talk to you all later because it's super long. I got a lot on this topic. I'm planning to make a video on it in the future.

Speaker 0 | 24:35.765

Yeah,

Speaker 3 | 24:35.845

we should sync up, buddy.

Speaker 2 | 24:37.345

Oh, dude.

Speaker 0 | 24:38.045

And you can repost.

Speaker 2 | 24:39.086

We're going to take a look, man. Take those kids, dude.

Speaker 0 | 24:45.568

Agreed. I don't know what I'm agreeing to, but... Um, what is this? Uh, is this blender?

Speaker 1 | 24:54.054

Nah, unity

Speaker 0 | 24:58.157

Why unity?

Speaker 1 | 25:00.598

Because i've been developing on it for 15 years

Speaker 0 | 25:03.936

Okay, fair point, fair point. Just because it was a bit of... Okay,

Speaker 2 | 25:08.157

and then final question, why is the guy doing that?

Speaker 1 | 25:11.578

At Unity, that controversy, if you actually read it, was manufactured to create marketing jazz because the licensing issue only affected maybe a thousand people who basically didn't want to pay their hosting bill, which was fucking everyone else over on it, which was very frustrating. So as a result, they fired an executive because... There was a bad marketing decision to do that. That's how they came out of these trolls, these people who refused to upgrade their Unity version so they could circumvent having to pay usage fees.

Speaker 5 | 25:49.200

This is like when Adobe moved to the cloud. I remember that whole debacle that happened with Photoshop. I remember that so well. It happened with Adobe,

Speaker 0 | 25:57.867

too.

Speaker 5 | 25:59.848

Yeah, it's actually like history repeating itself. I've got to go now, guys, but it's been a pleasure speaking to you all. Princeps, it'd be great if we can connect at some point if you're around, talk a bit more about it. Yeah,

Speaker 0 | 26:10.452

for sure. I will be on here more often. So I was talking to Tonic about like, we can do these weekly or by like a few days down just so that we can, because initially in October, November, we hung out in a lot of the voice. chat rooms um and so i kind of want to get into like building things and putting things out and putting out youtube videos and podcasts and kind of automating the pipeline of those things and just kind of showing people because i realized that we're super weird to like um very cutting edge essentially and um a lot of people you What we think is normal to us, like I barely show somebody like basically my factory creating agents and then having those agents like write blog posts and then having the SEO agent say, hey, you know, to them, it's so novel and so weird. I'm teaching my little brother how to do agent stuff now. Right. So I noticed that this is between.

Speaker 5 | 27:15.922

Is this with crew AI or just normal agents?

Speaker 0 | 27:20.524

Just normal agents. So I do a lot of autogen stuff. I like the interface. It's backed by Microsoft. I just kind of like them a bit more. I haven't delved deeper into other ones just because I want to specialize in one of them and then kind of build on top of that and have some sort of like influence in how that library is developed further based on the influence that I'm able to gather from the community. So part of it is that. build something interesting with it, share, put it out. And for the people who don't know how to run AutoJoin, it'd be nice for them to be able to just use agents without having to worry about pip install and setting all these things up locally because fundamentally, a lot of people in the world don't care about your open source GitHub project. They just care about solving a problem. in the most efficient way possible with the least amount of resources. So I think these agents, the whole picture earlier about like bringing agents into the context where work is done, I think 2024 is the year of agents. And if you bridge that thought with the next thought, it's, you know, like, yes, the year of agents, but agents doing what? Well, agents helping us in the workspace, right? It'd be cool. Like, I think we have Craig here recording, right? It'd be good if Craig could pass this meeting's MP3 to another agent. That agent could then, you know, de-script it or, you know, just turn it into a script, essentially. And then you could create a blog post from that and post it as a podcast. If you had another agent clip it for really, like, interesting clips. And then you can pass it on to another agent to make YouTube shorts and TikTok. So you can see how this pipeline can be built. The thing that I sort of kind of terrible at, it's organizing people. I wouldn't say terrible, it's just that shy away from it just because I want to build and work on that rather than like managing people. I don't know, I don't find joy in that. But if we did have people who are interested and like dedicated so you don't have to manage people, then we could actually say, hey, like I have, let's say, two hours today. that I can program and contribute to this, right? What kind of tasks would you want me to do? Or like, it's first having a cohesive agreement that, hey, this is a place where we as builders come to build cool projects and collaborate together, right? One last pitch. So I was, my little brother was working on a Shopify store, right? And I was like, okay, that's kind of stupid. It's stupid because it's not that it's stupid to make a Shopify store. The way he was doing it was stupid because he was doing it like everybody else was doing it. a year, two years, or three years ago. And I'm like, hey, dude, you live in the age of AI. Figure out how to use AI. And then I sort of found a best friend. right? Do you want to be the greatest Shopify store maker? Or do you just care about money? Right? He's okay. Well, I just care about money. Right? And so I'm okay, we just care about money. I saw him looking at Upwork. And I'm like, okay, so I went through Upwork. And I was looking at like, the tasks people have on Upwork. And I'm like, yo, half of these are just me generating things with Dolly or me generating things with like, um, open AI, right? And I'm like, okay, I'm going to try that with him, right? Because he cares about making money. He's like 15, right? So I'm like, okay, how about let's, let me try, let's apply for some of these jobs. And then let's, let's do them really quickly. Let's build that reputation up. And now you're making money, but the backend, we have to figure out how can we automate this, right? There's a really good book I read once called Life 3.0, and they talked about an Omega team. And in the first chapter of them, is that they figured out how to take these virtual assistant jobs from Fiverr, Upwork, Freelancer.com, and then pass them on to agents, essentially. They didn't use that word in the book, but it's essentially agents that can be able to then do those jobs. And that's a pretty good deal. We can have money coming in from agents.

Speaker 0 | 00:00.358

doing work and tasks for other people because those people don't really want to learn how agents work they don't have the time the technical know-how or the established like do you know how this could tie into something i was just looking at and i was speaking to my co-founder today you

Speaker 1 | 00:19.635

this would be amazing if this was done with that new one. I haven't even looked at it yet, but the new auto-turn one that is running on your computer. So it controls your whole computer. Oh, Open Interpreter. It's quite invasive, but has anyone seen it yet?

Speaker 0 | 00:35.523

Yeah. Oh, yeah, I use it all the time. Yikes. You want to talk about that? You probably could.

Speaker 1 | 00:40.784

The one that can write tweets for you just literally controls your whole computer. You just tell it to do something, and it's got access to your whole computer.

Speaker 0 | 00:47.386

Well, the question is,

Speaker 2 | 00:48.626

which one of those are you talking about? Are you talking about Open Interpreter?

Speaker 1 | 00:51.067

I don't remember which one it was, but it was one that was recently posted.

Speaker 3 | 00:56.548

I saw YouTube video on that. Yeah, yeah, I saw that. What was that called? Oh, Task Weaver. Taskweaver.

Speaker 1 | 01:01.650

I don't know what it is, but it was on GitHub.

Speaker 0 | 01:03.831

I know Taskweaver. I'd love to connect with you on that later, maybe. Because that's a bit niche,

Speaker 2 | 01:11.536

I think. Let's see.

Speaker 1 | 01:14.098

Not really, what Princep is talking about. And then, I don't know.

Speaker 0 | 01:18.280

Taskweaver? Princep?

Speaker 1 | 01:20.982

No, he's saying go for the really low-value... Like charms. jobs on fiverr and upwork that no one really cares about and no one really applies for um and they're just sitting there for days maybe do a rule or something filter it i want all the shit that have been around for like 20 days or 50 days nobody wants two dollars and then that like that ai autogen thing will do it for you using dali because it'll log in

Speaker 0 | 01:56.318

So here's an example.

Speaker 2 | 02:01.684

Go ahead, Yikes. OK, let's see. So if it's Open Interpreter, then gosh, I have to organize my thoughts now. Yeah, well, so if you're talking about open interpreter, just generally the interface of thing that controls computer is very useful. Either, oh yeah, it might be self-operating computer that you're thinking about. But either way, there's a bunch of permutations of these. One that has caught my eye recently is... TinyGP, or I forget what it's called. I just looked up the paper earlier. Basically, language models are, they're still kind of sloppy with computers. They're really good at phones. Because the feedback that you get on a phone is all motion-based, and the apps are designed to communicate directly via graphics, it's much, much easier for a... a vision model to interpret what's happening on the screen of a phone and then replicate the workflow than it is like a desktop computer. Yeah, so the thought that I was having this morning was, okay, well, there is a mobile phone emulator I can put onto my computer, and then I can use that as kind of a remote control. And that way, I can basically have a phone that I give to the agent, and the phone has all the stuff that I want the agent to have and be able to control and et cetera. And then I have my actual machine that's mine that I don't let it touch. This solves two problems.

Speaker 1 | 03:56.902

So you've basically sandboxed it in that environment. You just watch it continue. And it's not really going into your area. But you can still watch it so it doesn't make something go wrong and make it go boom.

Speaker 2 | 04:08.926

Since you're running that as an emulator, you can have that interface connect directly to your desktop computer. So you can give it access to the things that you want to give it access to. But you can also sandbox it away from messing stuff up.

Speaker 1 | 04:22.034

That's brilliant. And is this just an idea, or do you have a GitHub link that someone's already done this?

Speaker 2 | 04:28.120

So I have a link to a paper of somebody that made an agent that can do the mobile phone part. The emulator just exists. That's a thing you can do. The thing that you would want to do is kind of rethink, or you would want to have that phone emulator have more direct access to the machine that it's running on. So you'd have to make an app or something.

Speaker 1 | 04:57.032

That's amazing. That's amazing. And just to add to that. Obviously, the clear situation here is you need an LLM that does function calling, right?

Speaker 2 | 05:08.629

Well, so that exists. Let me find it real quick.

Speaker 1 | 05:16.023

Please find it and send the link over. I will read through it myself. That's quite of interest. The reason why they connect.

Speaker 0 | 05:21.087

I love that there's function calling. I'm serving it right now. You can try it out.

Speaker 1 | 05:25.750

Yep, next to Draven.

Speaker 0 | 05:27.031

Yeah.

Speaker 1 | 05:27.432

I think I told you about that one, Tano. Oh,

Speaker 0 | 05:30.274

no, no. That one came out months ago. They actually have their own demo that's been up for months also.

Speaker 1 | 05:36.883

I'm messing with you. What the fuck?

Speaker 0 | 05:42.266

My ego came out right there. I fucking walked right into that one. You did, head first.

Speaker 1 | 05:54.574

All jokes aside, the reason I'm talking about that, who was talking about the mobile phone autogen? Yikes. Yikes. What would be really good is I did recently have a meeting with Eric Hartford. I don't know if any of you know who he is. But yeah, I had a meeting with him a couple of weeks ago. Okay.

Speaker 0 | 06:20.900

Sorry. Oh yeah, Eric. Yeah, I don't know who you are. I don't know who they are. Oh yeah, Eric. I used to know him in high school. How is he doing? No, no. Tell us who he is a little bit.

Speaker 1 | 06:32.445

The TLDR of it is he came up with the Samantha model, the open source Samantha model. the one that all the people use to like emotional LLM effectively, the lady one. He also came up with the dolphin fine tune model, which is quite high on the ranking boards.

Speaker 0 | 06:52.779

Ah, Eric Hartford.

Speaker 2 | 06:55.020

Yep, I found him. By the way, do you want to...

Speaker 1 | 06:57.780

Yeah, he's like a quite well-positioned man in the space. Anyways, I went down a rabbit hole and I realized that there's not many LLMs that can do as good as Nexus Raven, which Tonic's already mentioned, and GPT 3.5 for function calling, which basically means you give it an API and it can use the API really, really well. apart from GPT-3.5 and GPT-4, like just consistently, I mean, in production. So the long gist of it is he will be soon releasing Dolphin 3.0. He's a bit delayed in releasing Dolphin 3.0 because he took on a new job doing some, I think it was, he's working for a company that specializes in LLM, emotional chatbots for video games. So imagine you're in a video game and you walk over to an NPC and suddenly you can talk to that NPC. about everything.

Speaker 3 | 07:50.663

I read an article about that in Kotaku.

Speaker 1 | 07:53.331

yesterday yeah yeah so we're just doing games real soon yes that's what he's building at the moment and he's done a deal and the companies are working closely with nvidia for that npc is basically powered by llms but emotional llms yeah but yeah so he's been busy with that so he's he's delayed the dolphin 3.0 but when he releases that he did say he's going to also release the i think it's called is it called fine-tuning data sets right when someone yes you Yeah, so he will be releasing the fine-tuning datasets. And now, to me, I think it goes really well with the new Microsoft PHY2. Is it called PHY2? P-H-I-2?

Speaker 3 | 08:31.010

That's the new one that just came out.

Speaker 1 | 08:33.712

Yeah, but they just updated the license to make it MIT license.

Speaker 2 | 08:39.957

Yeah, just in case people haven't seen it yet, there's a permutation of PHY2 that has vision.

Speaker 0 | 08:45.642

Ooh, yeah,

Speaker 1 | 08:46.303

amazing.

Speaker 3 | 08:47.003

But the point is... Just switch over to image input instead of...

Speaker 2 | 08:52.163

I'll have to double check. I was actually meaning to throw up a notebook for it.

Speaker 1 | 08:56.927

The reason why the connection, why I'm talking about that is obviously if we can get, if Eric finishes and releases the Dolphin 3, the Dolphin 3 dataset will allow you to fine tune any LLM. So it will be able to function call. the level or if not better of GPT or OpenAI 3.5 and 4. Now imagine if you're using PHY2 which is really good on mobile phone to what you're talking about think about the potential of that.

Speaker 2 | 09:28.923

Well, yeah, so it seems to be that there are other permutations of this. But the make open source models be able to do function calling is a thing that I've tried to keep up on. LightLLM has a bolt-on implementation. And then Gorilla also released a similar type of implementation. where there's kind of a secondary model that takes care of the function calling and you attach whatever primary model you want onto it.

Speaker 1 | 10:02.433

Yeah, but what if you had just one model doing it all?

Speaker 2 | 10:05.556

So I mean, there's more or less no difference. I mean, outside of, in theory, computational efficiency or locality, but either way. We have the Raven thing, which is interesting. I haven't looked into it too much. But so that the I linked the GitHub repo to App Agent over on the right side. I don't know how much or whether it needs any... it needs like a function calling thing or if it's relying on GPT-4. I think it is. But what I would be interested in is getting an architecture together that not only will run. So on the desktop that has the phone emulator, you can run 4V or whatever the most powerful model that your GPUs can handle if you want to stay local on that. And then the other thing that would be cool is to have one that actually runs on an actual phone, which I think the pieces are there to do.

Speaker 1 | 11:16.509

Which is why I mentioned 5T. Yeah,

Speaker 2 | 11:18.991

so the... Actually, yeah, let me go link the Vision 1.

Speaker 3 | 11:24.736

Vision 1 sounds cool, because then you can just hook it up to the camera on the phone. Wow. That'd just be fun to play with. It's like you could do live anime. Like Lens, real time. TikTok would be all over that stuff.

Speaker 2 | 11:41.750

TikTok is about to get fucking terrifying.

Speaker 1 | 11:47.971

this whole vision stuff and this whole like vision and all this ai like fake what's it called um deep fakes are getting so good now and it's a bit creepy how close it is to the u.s elections how good they're getting to

Speaker 2 | 12:01.322

be honest with you yeah like currently the all of the tools exist they just need to be linked together in order to like go straight from prompt to uh maybe not feature-length film probably like 10 minute YouTube video. And then especially if you want to turn your webcam on and do some motioning around, then you can get it even better. But yeah, we're very much on the on. the, like, it is imminent that, like, there will be some sort of application where I can just, instead of going to YouTube and, like, looking for a video that exists, it'll just generate one for me based on, like, what it, based on what I want.

Speaker 3 | 12:45.164

I haven't seen that for a while. That's a great idea. I'm working on that for music right now.

Speaker 2 | 12:50.265

I have another, I have a buddy who is, who's, yeah, in the same space. He's at AudioCraft. He's doing, focusing on the continuations, just made a browser extension. kind of stuff. What? Oh, it's

Speaker 1 | 13:08.483

Yeah, the commercial. Thank you, everyone.

Speaker 2 | 13:14.285

The what? Huh? Thank you, everyone. Oh, yeah. OK. He said he has to go. Got it. Yeah, I guess still DR. Actually, the tiny GPTV training process is actually really interesting. I'd recommend taking a look at it, Penguins.

Speaker 3 | 13:30.601

OK.

Speaker 2 | 13:31.502

But I guess there's, yeah, so there's a bunch of directions to go. Some of the stuff, I already have either pieces, or I have it working, or all of the pieces of it are working. They just need to get connected. Oh,

Speaker 3 | 13:46.574

that's dope. Oh, this thing is cool. Mm-hmm.

Speaker 2 | 13:50.505

Super dope.

Speaker 3 | 13:51.565

Yeah, it's super small, too.

Speaker 2 | 13:52.626

I like that. Mm-hmm. I like it. Yeah, since it's so small, you can put it on a phone. That's the move, right? So you take that and you stick it into the...

Speaker 3 | 14:04.693

I did see an app today come out on Google Play, popped up in my notifications. It's like a stable diffusion. It almost looks like original Dream Booth kind of stuff. It wasn't anywhere near as sophisticated as what this is.

Speaker 2 | 14:20.984

Well, yeah. Yeah, the TinyGPTV is a vision model, but it's not an image generation model as far as I know. Although it might be. I might have missed that part. But the question, yeah, I think probably I need to set this up for myself too, because half of the stuff is stuff that I wanted to build anyway, that I was going to open source either way. But I think it would probably be prudent to get some sort of, yeah, system for work stream stuff. That was one of the things that I think one of my old communities sorely needed was, it's And interestingly, in terms of user feedback that I got, one of the things that a user did when they showed up on the server was they pinged the bot and they said, hey, I have these skills. What can I work on to help out around here? So I think it would probably be, or the way that I'm envisioning it. is MVP would be just a normal ass GitHub project, or JIRA, or whatever. And then information about the status of those projects being fed into. You probably just feed it into Red's memory, honestly, directly. If you export a string that is a description of the current ticket status, then you could just dump it into our vector database in Pinger.

Speaker 3 | 16:00.853

You could write crawler bots or whatever. That could go into Discord servers looking for information and farming and scraping information about projects and stuff and updating it.

Speaker 2 | 16:10.978

Yeah, so I already have that. Or I have a bot. And what it can do is for a server that you invite it to, people can feed it things for it to remember. And the thing that I need, or the piece of it that's missing, is I need to take the repo that I have that dumps things from Discord to Markdown, and then I just need the piece where she can can do that in command and then vectorize it. But she already has the vector tools and everything else to be able to do that. And then, yes, you could. Or my inclination is to say, Like, on one hand, yes, you could crawl and scrape. But my preference is to kind of do it a little bit more above board, where I can go to these AI communities that I'm in and be like, hey, would you like a bot that knows this community, that community, and that community? And would you like to contribute to this bot's knowledge base? Here's the GitHub repo where all of the knowledge base is.

Speaker 3 | 17:16.445

Oh, that's a cool idea. That's fresh compared to how people used to acquire knowledge. Where it's like, let me go on Yahoo or whatever and search for something and I'm going to get like a page, like a board or a forum or something, right? But now it's evolved into these agents, like AI. like it skips a step. Like if I have a bot or something, that's like, I'm talking to an agent or whatever, and I'm getting like news updates or something, I would usually go to like a, like a news website or something. I've already gotten my information, my news or whatever. There's no reason for me to go out. It's like going to the store. It's like, it's like someone, it's like, Oh, I got to go into the store and buy milk. Or you could have milk delivered with a drone. Right. But like, why would you go out of the store again? If you just had to get everything delivered to you. like yeah so i there's that you wanted a trip like you wanted to go on a trip so it's it's like similar to that to like that with these agents like that's a that's a brilliant idea so there is um

Speaker 2 | 18:16.988

like on this topic of how are people using agents and how are they, or the term that the guy that I've been talking to is using is unstructured knowledge basis, basically. Where there is some area where the team communicates that's currently not really well organized, and how are teams taking that information and then using language models to like, compress and reason about it and enhance it, et cetera, et cetera. So the guy's name is Greg Camrat, and he was just going around doing research for trying to put together an article of going around to different companies and being like, hey, do you have a bot in your Slack? Have you been, like, what's your process for getting that information out to your team? Have you been using language?

Speaker 3 | 19:08.906

Oh, wow. It's like a sales agent in a way. That's like Salesforce kind of stuff, like a sales. It's like, hey, we just looked at your like discord. And would you want I've had Instagram bots like that kind of do that. Hit me up like, oh, I've looked at your site and we want you to like you want better artwork for this. We can make an image for this or whatever. But you could have that as all as I just going out and hitting up discord servers and people and trying to acquire and be like, hey, I'm an agent. Can I help your server? Do you need something made? Do you need this programmed? You know, that'd be crazy.

Speaker 2 | 19:40.964

Yeah, that would be...

Speaker 0 | 19:42.425

That's within reach, I would say, within weeks.

Speaker 3 | 19:46.970

That's like AGI kind of stuff. See, that's like, that's multi-bow dial. That's real higher level type of intelligence because under the hood, it's, you got these like... these multi-agent groups, kind of like, it's like 12 angry men, you know, just arguing about, like, what should I do? Whatever. And now one person is like the moderator and is like, hey, this is what we came to the conclusion for. It's democratic AI, I guess.

Speaker 2 | 20:14.529

If that's a topic that interests you, I have two. We basically, like, took that concept and ran with it for two hackathons, I think. The, like, take CRM data, upload it to... Sorry, I have... fucking giant sirens out the window. Take CRM data, upload it to a large context language model, use that large context language model to do personalized either emails or whatever, and be significantly more targeted to the individual user, basically, was the idea. So if that's a topic that interests you, I can link a couple of repos. I think they're both open source. Yeah. But I don't think either of them are done. But the thing that I wanted to mention was the Greg guy is, like, that article isn't out yet. But once it is, I would be interested to grab that article and possibly see if I can grab his research. And then maybe we could sit down and be like, okay, these companies are doing this kind of strategy for getting this unstructured knowledge base together. How do we take that and turn it into, like... A, something that works with this Discord, and then B, something that can be shared between other Discords. which is like, that's just a general project that I've had in mind for a while, hence why I have pieces of it built. But yeah, I think there's definitely a need for it too. Or that's the thing that's the most, one of the more interesting things. It's that, or the knowledge base thought in general, and the two pieces of that are the Discord bot, and then the public drop off of thing I found that I want to put on the GitHub reveal for the community kind of thing. Those are the two things that are interesting to me about the idea, primarily, at least.

Speaker 3 | 22:14.185

I think that is very important stuff we should explore more into. Add that to my notes here.

Speaker 0 | 22:21.188

Can I offer a different perspective? Definitely, yeah. I think that we might sometimes like as engineers over engineer things um i've been doing some stuff with autogen and i just found myself over engineering things until tanya came over and was like hey buddy um We got to get a demo video out, bro. What have you been working on?

Speaker 3 | 22:51.973

Crunch time begins. Yeah,

Speaker 0 | 22:53.734

dude. What's wrong with you?

Speaker 3 | 22:55.275

Some people forget the engineering process completely. There is a delete phase. You can't just be making stuff all the time. I know exactly what you're talking about. At some point, you're going to be like, okay, it's frozen. Can we delete something out? And you don't want to be making something and deleting at the same time. It's like before you're getting to release. You're testing, you're doing lots of regression testing, you're getting lots, that's all your testing phase in. So you're able, that's the time when you're like, do we really need this function here? No, delete that out. Does everything work at the end? Cool, whatever. Who cares why or what it does? We don't need to write a thesis on it. That's not important. What's important is do we pass our KPAs that Sony's requiring us for on our consoles or whatever, or Microsoft requires for our application to get certified, right? So really that's all it comes down to. Very important points. Very important.

Speaker 0 | 23:43.670

I think we, the reason I bring this up is because, um, I like, and it was right to be like, Hey, like you're okay, dude. Like we need, like, what are you doing? And I need, I need somebody like that to be like, Hey, like, buddy, like, what are you actually working on? Oh,

Speaker 3 | 24:02.836

I could do that for you. If you ever want that problem or code review, just hit me up. I'll, I'll definitely, I have no problem. I can just laugh.

Speaker 2 | 24:12.151

The actual thing to build right now is the automated project manager that doesn't suck.

Speaker 3 | 24:17.635

That was this random idea. Someone put up a video or whatever of the swarm of AI agents that writes research papers. I think that was off through this. I saw a link for that. Imagine a game studio that just is a bunch of agents. And you have one that's like the project manager. Another one that they're the designers. And other ones that are programmers. And then you have testers. And then you can do this. Yeah, but imagine if you just implemented a facet of that, like just the testers. Yeah, we have AI testers.

Speaker 0 | 24:43.642

Yeah, I just linked you to something. It's called Spinach. And it's not exactly what you're talking about in terms of like project management, but... they do connect it to like, so basically we'd have a meeting like this on Google Meet, and then it would summarize the entire conversation, and then it would create tasks on Jira or Trello or like, which one else would they use? Confluence, Jira, Trello, Asana, QuickUp. And basically like, that's part or majority of what a meeting is. If you think about what a project manager does, it's a... like, you know, they listen in on meeting, make sure things, like, go straight and right. The thing that I actually wanted to kind of hit on here was that we, like, we have low-hanging fruits, right? So F, his name is just F, or am I not seeing it completely?

Speaker 2 | 25:46.116

Oh, yeah, I'm seeing it, friend, I think.

Speaker 0 | 25:48.758

Okay, he went to sleep, and... And, um... Um, but essentially he sent me a link to his Fiverr and he just said like on his Fiverr, Hey, uh, I can help you make autogen, um, uh, superpower idea using, uh, Microsoft autogen. Right. And so he, he was able to, um, get some contracts, right. I think he made almost a thousand dollars, uh, just from people hitting him up and being like, Hey, um, I've been hearing about this autogen thing. I don't know how to set it up. Uh, help me set it up. Right. And for every single person on this call can probably do that. Now, if I had a thousand extra dollars from doing autogen stuff that I already do, then I'd be happy, right? I'd be a thousand dollars richer, right? I wouldn't be a million dollars richer, but I'd be a thousand dollars richer. And that kind of makes me think like we tend to nerd out a lot, right? And especially when we get into the technicals of... Like, I hear Yikes talking half of the time. I hear Yikes, Mike,

Speaker 2 | 26:50.490

Mark.

Speaker 0 | 26:52.351

And you guys just go into, like, so much depth about LLMs and weights and biases and, like... A bunch of other things, like Oliver starts talking about latent space and prompts and opera and onions.

Speaker 2 | 27:07.923

I had to make a rule of like when the third law of thermodynamics gets brought up, I have to leave the conversation.

Speaker 0 | 27:16.149

Right. Like, OK, it can get really dense really quickly. And so for me, as much as I can understand that stuff and I can relate to it and I can follow along a little bit. Right. It's not really what I care about. I care about two things. I care about making my life easier and I care about making money. I care about making money consistently, efficiently and automatically, especially since we know so much about these things. I don't need to get into like LLM building, like building new models or anything like that. I think the models that are out there are pretty good. People are specializing on that. I just need to specialize on this part of the market. And I kind of want to offer you guys this perspective. Maybe it might inspire you or... help you think about this a bit differently. There's the super technical people, which are some of the people in this chat right now are very technical people. On the other hand, there is completely novice people who look at this, you know, they're kind of just standing on the bleachers. They want to get involved in the game, but they just didn't practice. They don't have the skill set. They don't have the knowledge, the background. They don't have the fundamental understanding of just... computers and computer science. And just like, I didn't go to school for computer science, but sure as hell, I learned how to program by watching a ton of YouTube videos. And like, I got a job and it worked for six years as an Android Kotlin Java developer. And so I have that for me and growing for me. And so I can pick these things up and I can kind of develop with them. The reason I'm bringing this up is because if you kind of think about what F has been able to do, he went to Fiverr and he just said, hey, dude, I'll build you something. Like I'll develop you a custom chatbot and API on your data using minechain. Right. And he got 21 people to pay him like from $90. And that's not that hard. Technically, honestly. I would just go to GitHub and clone something and then just update the APIs, put the key in there, and then send it to them, right? And so...

Speaker 2 | 29:14.441

Yeah,

Speaker 0 | 29:14.781

for the...

Speaker 2 | 29:17.342

Yeah, I'm probably going to take off pretty shortly, but the...

Speaker 0 | 29:21.865

Oh, man.

Speaker 2 | 29:22.225

I am organized.

Speaker 0 | 29:23.225

I'm talking to you, Yai.

Speaker 2 | 29:25.967

I know, sad times. Busy man, busy man.

Speaker 0 | 29:29.632

I'll be wrong.

Speaker 2 | 29:31.693

Right, right. I am working on organizing a hackathon for when Sam releases the GPT store. And the people that I'm working with were thinking about trying to make one of the things, or one of the goals. Or that hackathon is like, who can actually make a dollar with their thing first? Like, not just make a slide deck of your potential business model, like, who can actually get up and running and sell something? So in that vein, like this kind of low hanging fruit, let's go on Fiverr and sell shit, I have another kind of group of friends that kind of started down that road. And I think it's like, it's pretty valuable because obviously we have a bunch of like ideas of like cool AGI shed or whatever, but at the end of the day, like listening to what the larger, what like people at large are ready for is probably like a better. not just ready for, but willing to give something up that's meaningful to have it. That's a good starting point to figure out what things you should be working on, basically. And what stuff you already have that's sellable, and then you can think of the cool next step of AGI shit that you want to do on top of that. But instead of just thinking of all the coolest shit that's far, like people just aren't ready for AI agents to take over their whole ass phone or whatever. But hey, they'll pay on Fiverr to have an agent write them a blog post or what have you. So yeah, I think it would be meaningful, I think, to start going in the direction of, yes, you can build cool thing. Are you able to monetize? Are you able to productize? Are you able to productize while still remaining open source, et cetera, et cetera?

Speaker 0 | 00:00.514

Can I connect with you,

Speaker 1 | 00:02.514

Yates? Yeah, yeah. I was actually working on a similar product like this at my last company, DreamScale, but we didn't want to, like, it just didn't work out fully. I wanted to go more in the line of what you're talking about, and my other partners wanted to go more in the line of just, like, more Jira-type product. But I really feel in that. That's a cool, that's a really cool idea. And it's important not to, like, make it too complex of an idea. It's got to be simple, something easy for people who aren't. nerds like us in AI space to understand. Can I explain this to one of my parents or something? Or the guy next door or something? Does it add value to their life? Or something? What about a bot that basically just scrapes your Gmail and tells you what's important or not today? That's easy. My dad would use that.

Speaker 0 | 00:53.615

Very expensive.

Speaker 1 | 00:55.036

Yeah.

Speaker 0 | 00:55.376

There's something you guys were talking about. mentioned that I kind of don't want to lose focus on. Yikes. The whole perspective about like, can you make a dollar with this? Right. I realized after like doing the hackathon for AutoGPT and then kind of taking a step back and I had to go back to like doing my company, Molly, right. I'm like, okay, on one hand, like I love hanging out on these calls. I love interacting with everyone here and I love actually sharing ideas and like, like testing out these new, like LLNs and these new libraries and like what's hot on the street. Right. But at the end of the day, I have to make a living, right? And I can't make a living, like, testing out products, right? Like, I can, and maybe I haven't figured it out because I don't understand.

Speaker 1 | 01:46.720

No, you don't make money like that.

Speaker 0 | 01:48.361

Right? Yeah,

Speaker 1 | 01:49.022

but you have a better chance of making money by testing out indie games on Steam by buying them. Like, right? You're not going to make money doing that.

Speaker 0 | 01:56.266

I don't make, like, streams and YouTube videos and stuff like that.

Speaker 1 | 02:00.389

Yeah.

Speaker 0 | 02:01.538

So to connect with Yikes, the reason I actually left for a little bit was just to focus on Mali and understand my business and which parts I can be able to automate, right? Like the automating blog post idea was at least a justification for me to be able to spend time working in Autogen, building these agents to then like produce blog posts based on a content calendar that go in line with also like the Instagram posts and the... like TikToks and the videos that we'd end up posting, right? So for me, it was like, okay, like, I can't make money from this, right? Like, there was somebody who used to come here, and he used to talk about a newsletter, right? So, you know, when people come and they have these ideas, I'm like, okay, how much are you willing to pay for it right now for me to finish it for you, right? Because I think talk is cheap. And, like, if... If you don't put your money where your mouth is or put your time and effort and build something where your mouth is, then... Yeah, you know, I'm going to call you out on it. And at least I'd hope you guys would call me out on it too. Like, Tana came around and said, hey, buddy, it's been a while. Where have you been? What are you doing? Are you doing anything useful or are you just fucking around and talking? I was like, man, I have to pay gas, electricity bills. How are you helping me with that?

Speaker 1 | 03:23.590

I just avoid stuff. Like, I try to get in my. young wisdom years i try to i identify situations or people that are talk and all of that that are that i i can just sense that they don't have traction or or i call momentum in life or what they do and a lot or even lack of passion that's usually telltale style i could tell someone within the first five minutes of talking with them do they have any passion in their voice or what they're talking about like what level are they're on and if they don't vibe at my level or how bad i just avoid them i don't even bother calling out you just see me dip out you And I'm just like, oh, because my time is very valuable. And I don't,

Speaker 0 | 03:59.448

I just don't have enough. No, no,

Speaker 1 | 04:02.290

this is all super good. I want to make money. I have a living. I have financial responsibilities and stuff. I don't have time to sit and try yet another person's large language model or something to do. There's a few that I keep tabs on or what they're doing. I really enjoy this Tonic Discord and how it's evolved. Thank you very much for putting the time in. This is where I get my news for my AI now. to be honest with you. And that's what I'm saying. Just like, can we digest this?

Speaker 0 | 04:28.936

I'm reading a lot of AI stuff.

Speaker 1 | 04:31.282

Are you familiar with that 1440 news? Are you familiar with that? No. Okay, so 1440 News basically scrapes all the news for the day, and they basically generate one email that is sent to you. It's called hello at 1440 news or 1440.com or something like that. Right. And like something like that would be pretty dope for Tonic, where it just like, that's even simpler. It just it's just emails you a digest of like, this is what's happened today in our Discord server. Right. And it formats it. And it makes it kind of. Yeah, check out 1440 News. I'm not saying that's a really cool idea. And they try to be non-biased. I don't know how their backend works or stuff. I'm assuming they probably use some type of GPT or whatever to help format, translate an idea. Because they can just give it a sentence. It can take a sentence and extrapolate a news article based on all of the knowledge. So it basically takes all the knowledge for the day, puts it in an XML document. And then that is probably uploaded somewhere, and then it's as simple as basically using a copilot or a GPT-4, which reads that as a knowledge and says, okay, here's two sentences of these two topics. I know these other things we're talking about that, and I can correlate them and put them into one paragraph. And it does that. That's basically what it does. And they have another vision that goes...

Speaker 0 | 05:47.728

Pen? Pen glue? Pen glue?

Speaker 1 | 05:49.549

You can call me Pen. Pen.

Speaker 0 | 05:51.671

I can call you Pen. Okay. Hi, Pen.

Speaker 1 | 05:53.012

Yes.

Speaker 0 | 05:53.773

Hi, Pen. I'm Prinkips. Prinkips. Nice to meet you.

Speaker 1 | 05:56.795

Nice to meet you. I think it's a great idea. So I'm trying to get, what is the mechanic behind this idea? Like, all this talk's great, but what's the mechanic of the auto blog thing?

Speaker 0 | 06:08.285

Can I? So for that one, honestly, I'm basically almost done with it. The only part is, like, to... I'm connecting it to a front end and then I'm going to connect it to a web flow API, either using make Zapier or an N a N. So like I haven't connected it to discord. So that's the next like development phase for me would be to have it be able to tag, to tag a bot on discord or telegram or WhatsApp or Slack and tell it, Hey, um, Write a blog post. Not even like write a blog post. Like as I said, it's a content calendar that like, since I have a content calendar, it can refer to, it will automatically like be on a schedule to write those blog posts and publish them on Webflow with an image, right? So there's an agent who will generate the image. There's another agent who will like look at the content of the image and provide feedback for the first agent who made the image to make sure that the image is good. And then next it's actually to then have. The Blanc was written by another team and then put those together and then push it up to Webflow and then review it. Like I'll review it before I publish it. So for them.

Speaker 1 | 07:25.929

You're the editor then. So you have your whole news crew. That thing's cool. It's like Sim Newsroom. It's basically Newsroom Simulator 3000. That's basically what you've created. That's fun.

Speaker 0 | 07:38.436

That's a cool demo.

Speaker 1 | 07:39.716

We should work on a 2 or 3 minute video on YouTube. Just something that sounds good on that. There's only 2 minutes on that. I was on my ass about that.

Speaker 0 | 07:48.742

I'm good with that stuff.

Speaker 1 | 07:51.343

I can help produce that video if you want to produce. I'm really good with videos. I'm here with DaVinci and stuff. And now with this new text-to-video stuff I have working, like using SDL, Excel, that stuff works really good with Comfy UI. You gotta have the right cards though. But that is handy to make little bumpers and little clips and transitions. You can take one frame of one scene from two frames. Say you're doing a transition between clip A and clip B. You take two samples of frames from there and you put it in. You merge them into your... into your image to video, and then that basically makes a sample video. And then you can layer that on top of the actual blend of the two videos. You get really cool effects, really cool, really cool stuff. I was discovering that this week.

Speaker 0 | 08:40.525

I'm going to start actually editing pretty soon. So I'm glad you brought up DaVinci because I was like, fuck Premiere.

Speaker 1 | 08:47.530

But I wanted to talk about DaVinci.

Speaker 0 | 08:50.012

to you, Penn. I think that there's just some low hanging fruits to, like, for example, for this blog post, auto posting idea, right? Fiverr, I don't, I haven't looked into Fiverr as much. But I know that I spent some time this morning just looking through, because I have a little brother, right? And I have to teach him these things, right? And so I have to kind of essentially come up with a lesson plan for him, right? And so for like so i went to upwork right and i um if i actually look at blog posts like blog posts or writer or something like that they'll come up um basically a job posting of the thing i hate about Let me finish up work and then I'll kind of mention why I hate it. But it's essentially that they'll come up like jobs and tasks for, from people to do these things. Like here, this guy says, Hey, looking for someone to write four blogs a month for a hundred dollars, right? Topics may be given or may not be given, but basically he wants four blogs per month for a hundred dollars. If you think about how much that would cost you to have GPT generate these four blog posts, it is not going to be even maybe a dollar, right? Maybe, maybe it would be a dollar, maybe $5 if you're really pushing it. That's $95 in profit, right? And if you like sit here, continue to do that. There's also like, there's this other one which keeps popping up, which is like. They want, write about your one best passion hobby experience and become published how experts author on Amazon. Okay, so like what I'm trying to show here is that there are these low hanging fruits, which coincide with what we want to work on as a community, right? So like tokens are not cheap, right? And also having like money come in validates. the movement, it validates that what we're doing, what we're working on has value. Because I, I have a business, man. And I have bills to pay just like everybody else on this call. I cannot justify to my logical self, staying on a call and not having it generate either content, money, or like a personal brand, right? I think like, we all here are very articulate, and we all can just create a like a podcast, just about this stuff, right? Like a podcast and a newsletter, just from the conversations we have, would be valuable to people who want to stay in touch with the AI communities. And we can even specialize further into those experiences. I'm glad you brought that up.

Speaker 1 | 11:30.301

I thought of the same thing, or like probably about an hour ago. It's one of the first things I'm like, this would be a great podcast. Everyone here is so articulate. They are great conversationalists. And just like, I've learned a lot. That's why I'm stuck around. I'm just tooling around on my computer listing on this. It's just, it's going deeper. I like this. I like this.

Speaker 0 | 11:49.574

Same. Same. So for me, it's like, so what I told Tonic was like, look, think about it this way. What is the pipeline? So when we have a good idea, we want to think about the pipeline and then say, hey, you're responsible for this. You're responsible for this. You're responsible for this. And let's also find out people who... would be happy to pay us for this, right? And so a good way, like, the thing I hate about Upwork. Like, your brand would be the best. Like, if you could get a famous beer brand, like Moretti Beer. If you can get Moretti Beer's sponsorship, you're a king. I, why beer brand? I don't know, do they make wine in Italy? It could be wine. I don't know. I don't know much about that. I'm not sure. I just don't drink beer. Beer brand? Like, what, that specifically, right? No, beer brand is sick. Like, for example, or even, like, a vodka brand. Like, Absolute, not Absolute, but, like, Smirnoff. If you got sponsored by Smirnoff, that would be so cool. I think it would just be like... You'd be surprised. Like, a lot of the big beverage brands, like, have these, like, crazy brands. Can I play with that idea? Let me play with that idea, right? So, let me pitch you something. Um, for this beer brand for, we just created a Tik TOK and we use Pika and then we use, uh, what's the other one, the video generation site we use Pika and some other video text generation.

Speaker 1 | 13:19.893

I think it's called runway.

Speaker 0 | 13:20.814

Yup. Yup. And then, um, and then we just like on this Tik TOK, we just create a bunch of AI videos. For.

Speaker 1 | 13:30.177

like for that brand specifically that's how you actually get into my best for my best my best friend alan is actually doing that is we're i'm in the process of like consulting with him but he's doing that with tiktok he's dove deep but he's looking and doing that he has a whole ai avatar that he uses with adobe and all this stuff but he's looking to do exactly what you're talking about with the tiktok maybe we can fold him in on that because he has a lot of experience with how you can adapt that to actually get momentum and traction you useful stuff, not just a bunch of muggles talking about something, but actually people who are builders. People who are builders, yes. Very important to be a builder.

Speaker 2 | 14:09.637

If you need prompt to end point, I probably have.

Speaker 0 | 14:12.099

I am, yeah.

Speaker 2 | 14:14.480

If you need prompt to video, I should have an end point up for that within hopefully the week, I think.

Speaker 1 | 14:23.447

I have an audio craft plus notebook. too, if anyone wants that. It works really well just on the free. collab.

Speaker 2 | 14:31.589

Is that you got my are you in the audio craft server and do you know Big Dookie? No.

Speaker 1 | 14:42.639

I didn't know they had a Discord. I'll check that out. Thank you.

Speaker 2 | 14:50.726

There's somebody else that does audio craft plus, I think.

Speaker 1 | 14:54.509

There's only like two of us. It's doing really well on YouTube. In the last week, I've gotten about 15,000 plays just from YouTube picking it for next. And I have not had one copyright flag yet.

Speaker 0 | 15:06.899

How many thousand?

Speaker 1 | 15:09.722

About 12,000. 150. And that was just in...

Speaker 0 | 15:15.687

You should be monetized by the end of the month.

Speaker 1 | 15:18.689

It depends. It's growing kind of exponentially. I've been thinking about setting up a bot on the notepad that just basically constantly... Once in a while, I kind of tinker with the prompt and I feed it. I could even make a... a chat-based API where you're in the chat and you can do a slash command or a dollar dollar sign and type in like Adjust prompt or add the prompt and it'll update it and it'll just constantly just be spitting out music every Every eight minutes it puts out a new song and it just uploads it But then I also need a piece of artwork. I usually go and I generate a piece of artwork off DALL-E 3. And I mess with the prompts. I kind of take the audio craft prompt I use and then I put that into GPT or whatever and then I get an actual like image prompt from that. I use that as a cover art and then the audio plus just generates an MPEG. and it just uploads to YouTube. That would get a lot of plays. That would put those livestream businesses and stuff out of business. They just stream audio and music constantly.

Speaker 2 | 16:21.502

Pro tip for you there. While you're doing that generation, just record the screen of the denoising and use that as the animation for the video. People like watching that.

Speaker 1 | 16:36.435

That's a good idea. Because I don't watch that. I didn't know you could actually watch that. It just sounds like some information on that. That sounds interesting.

Speaker 2 | 16:46.863

It depends on what UI you're using. If you're using Comfy or Automatic 11, then... should be able to watch the denoising step.

Speaker 1 | 16:54.633

Oh, yeah. Oh, oh. Well, the AudioPlus, that just runs in a Colab book. It's just with the web radio.

Speaker 2 | 17:00.155

Oh, I meant for the image generation.

Speaker 1 | 17:02.095

The image. Oh, it makes it. Oh, I got you. Sorry, I'm high. If it makes it, yeah. No, I do mean the Dolly 3 via the API.

Speaker 2 | 17:10.718

Yeah, if you're running stable diffusion, like the model behind the Dolly 3, if you do that manually, then you can. watch the denoising process you can watch the image oh oh yeah that's yeah if you do a bunch of those in a row you can put that in front as your music video and just kind of cycle through those you're doing it anyway it's really easy that's a great idea

Speaker 1 | 17:35.617

I'd have to make an update on the Audio Plus, which isn't a big deal for it. Right now, if I feed it in a video, it's not able to decode the video and then put a waveform on top of it. It just takes one of the first ten frames and uses that instead. It's not smart enough to do multiple ones, so that would be a good update to that. That would be cool with the denoising.

Speaker 2 | 18:04.823

You could either do the denoising, or you could just use an LCM LoRa to generate a 5 to 10 FPS video of that video. There's hugging face spaces that I know there's some that will use your webcam. But I'm sure there's some that you can just feed in a video prompt and it'll spit it back out. But the other benefit of the denoising thing is that you can cut those into shorts really, really easy.

Speaker 1 | 18:31.941

That's a good idea. So that was what I wanted to do after, was once I got the more popular songs, make another system that makes shorts for that, with that kind of visualizing stuff, and then uploads that stuff. I was taken aback with how much people enjoy listening to that AI music. I'm like, okay, whatever. I'm a big fan of that. It's hard to make it get real good stuff or stuff that's not like...

Speaker 2 | 18:59.989

like crash like yeah i prefer the um or like i like the i like the ai drake songs you know what i'm talking about where they don't yeah where they don't uh They don't fully generate it. All they do is they remask the vocals, basically, and then make an actual song on the other end of it. But the audio craft part is interesting. My buddy's really into, he's got a drum and bass fine tune that'll just take 15 seconds of audio and generate 15 more.

Speaker 1 | 19:31.054

That's pretty I still can't get it to train my own audio. I've been trying to figure out how to, like, here's my sample library, and I'll train on this. And it's just the documentation could be a little better.

Speaker 2 | 19:46.005

Yeah, I'll see if I can track down the server for you. There's a whole

Speaker 1 | 19:49.907

OK. Yeah. Am I still on here?

Speaker 0 | 20:06.846

So I was going to ask, what would you guys want? Like, I can provide you guys agents that can write blog posts and create images for them. That's what I'll do. The other part is the Discord bot? gathering data, basically, right? Gathering data for, like, for example, Craig here. And I think that might take some planning. So, Tane, are you still on? Should be late where you are. Yeah, I'm still on. Um, can you create another meeting for... or tomorrow's back for me, but can you create another meeting where we can talk about like the technical details of what, like, I think, let me recap. I think we should have a community project that we work on as a community. And this one, this community project should. ideally bring some money to the people who participate in it. So it's not a hackathon like hosted by Lab Labs, for example. It is, for example, saying, hey, it can even be just like one of the things from like Upwork or like we talked about this before.

Speaker 2 | 21:41.991

Or like if you want the quick rundown, how I've thought about to do it before is you take a little bit of time. Whatever jobs people are doing, you take all the money, you throw it in one pot. You make a token test net or main net, and you say, hey, every single one of these tokens has an equal share of redeemable value on the appropriate fraction of the pot. And then if you need to pay rent or have groceries or whatever, you can redeem your token for the liquidity that exists in the pot. Or if you don't need it yet, you can you can stake your tokens and say, I'm locking mine up for three months because I'm going to keep working on this. And then I'm going to get APR on those tokens. I'm going to get interest. So you can use it as a, hey, I need money now. And hey, I believe in this and I'm sticking around. Or hey, I'm just showing up for one job and cashing out and being on my merry way.

Speaker 0 | 22:45.157

Like what? What library would you use for that? Library, yeah. How would we go about implementing that?

Speaker 2 | 22:53.338

Uh, smart contracts, blockchain shit.

Speaker 0 | 22:55.879

Yeah, yeah, yeah. So I'm with you. Okay, let me actually, like, take you a little bit deeper with this one.

Speaker 2 | 23:01.581

So would be my go-to.

Speaker 0 | 23:05.403

Gnosis safe? So just a Gnosis safe? Because I have been, I've been using, yeah, I should tag you. Oh,

Speaker 2 | 23:12.866

yeah, Colony too, yeah.

Speaker 0 | 23:14.587

Oh, yeah, dude, I love that. I've been with Colony for, since 2013, 20, no, they started in, like, 2015, 2016. but I've been with Colony for a long time. And the thing I like about them is the reputation. Essentially, it's exactly what you're talking about, but they have the idea of reputation and you can earn. So you have two tokens. There's the token which you're talking about, which represents actual like real world value that you can redeem. And then there's a reputation token that you earn from completing work. Your reputation token is the one you use to vote, but it decays over time when you don't get involved with the community. That's dope because let's say I was involved in October, but then I decided to go focus on my business and I came back. My reputation would have decayed during that amount of time.

Speaker 1 | 24:03.659

It's like a linear learning schedule. It's like a linear schedule. That's cool. Yeah, I like that.

Speaker 0 | 24:10.078

right so it's like yeah if we are gonna build like um i've already built a framework of this into uh the project that i've been kind of working on so uh yikes i actually implemented uh this so since the last time we talked um i i that I hit shit, and then I go and disappear. But yikes, I implemented this on the repo that Tanik and I have been working on. And so let me hit you with this. Yikes, do you know about Web3Auth?

Speaker 2 | 24:51.984

I don't think I'm familiar with this particular.

Speaker 0 | 24:54.958

It's pretty simple. Simple in terms of like, it's just allowing people to log in with their social media links, or the email or their phone, and you automatically make them a crypto account, right? So the whole idea is to abstract away the complexity of dealing with tokens. The other thing that I've also been working with is Connects. So Connects basically abstracts away... the complexity of bridging tokens from one chain to another. This further built on top of it, on top build, like connecting Web3Auth and Connects allows you to have a platform where people can just log in with Discord, log in with GitHub, log in with any of these social media stuff and have the ability to work, like use tokens without having to worry about what chain it is. And just kind of do it.

Speaker 2 | 25:49.202

Yeah, I think we just have a different stack for these. I have my DAO thing is either Zodiac or Aragon. My multi-chain is Hyperlane. And then my account obstruction is Alchemy.

Speaker 0 | 26:00.029

Zodiac. Zodiac released a stack. Because I know Aragon. I heard Aragon has been releasing some cool shit.

Speaker 2 | 26:09.938

Yeah, Zodiac is Gnosis' kind of DAO thingy. I ride Aragon. I can recognize it's powerful, but I fucking hate it. Yeah. Yeah, yeah, Zodiac's on there.

Speaker 0 | 26:21.101

Hey, their UI. I tried it some time ago, and I heard they improved. Yeah, if you haven't used it in a while,

Speaker 2 | 26:30.024

I would recommend it. Their UI has massively improved.

Speaker 0 | 26:35.290

Yeah, but I'm so deeply entrenched with Colony, and Colony is about to release a new version. So basically, my whole concept is like, dude. I love what you said, right? So what I'm actually doing here is like, not only saying, hey, what you're saying makes a lot of sense. Here's a framework in which I'm working on, like, that's the thing about working on all these projects, man. It's just one of me. And Tonic is also cheering me on and making sure that I'm not going into some weed somewhere, looking at some new libraries, holding me accountable, essentially. But when we kind of think about digital economies and digital communities and how value is created and shared, blockchain...

Speaker 2 | 27:19.052

I think we're kind of aligned on that, right? I think we've talked about that before.

Speaker 0 | 27:22.713

Yeah, we have. And so the last thing I actually want to bring this up with you is my stack is completed with Stripe Treasury. Are you familiar with Stripe Treasury?

Speaker 2 | 27:38.697

I am not.

Speaker 0 | 27:39.982

you go check so you stripe um but do you use the treasury so APIs that I'm going to connect to this just to complete Yikes' idea and abstract away the blockchain aspect of it. So there's Stripe Treasury. And then there's, so Stripe Treasury basically allows you to create a banking system. It's banking as a service, right? So on one hand, now we have set up the framework for blockchain and people being able to have tokens, earn tokens, earn reputation, exchange tokens, that, you know, that side of it. But now we have to kind of think about how do we liquefy that and turn it into cash in their bank, right? So one of the things is that we introduced Stripe Treasury and also Stripe Crypto. So if you guys are not familiar, Stripe does have a crypto use case, right? So you can like on-ramp people. So, for example, for and this is kind of the holistic thing about Poly that I never really told Tonic. The idea was that when people buy tokens for people come to the platform, they buy tokens. Right. And these tokens essentially are tokens that we can use for the chat GPT. But technically, they're buying our like token that we call, let's say, Tonic. Right. Let's say the Tonic token. So they come in and they buy the Tonic token and they give us fiat for it, right? And now we store the Tonic token, we store their value in Tonic tokens until they make an API call or until they use a feature that requires us to use their tokens. Because for us, we don't actually have to exchange Tonic tokens into... OpenAI credit tokens, right? It is just that we'll get back from the OpenAI API, hey, here's how many tokens you use, and then we'd have to convert, we'd have to subtract those OpenAI tokens from the tonic tokens that the user has in their account. This actually allows us to have users who use and pay a subscription, a user comes and pays for the service, and it's basically bridging the liquidity problem. Because once we have fiat, Then now we can create a liquidity pool for the Tonic token based on the fiat that's coming in. And this is kind of where that redeeming thing Yax was talking about comes in because now you have a liquidity pool of fiat where people can be able to swap their tokens in to get fiat to go pay for bills. How was that?

Speaker 1 | 30:18.934

I think it's a great business model.

Speaker 0 | 30:21.656

It was like a 50 minute pitch. Yeah, no, I've been working on that for some time, honestly. I have, like, documents about it, and, like, it's not just something that I'm, like, spitballing right now. Sorry, I rehearsed it.

Speaker 1 | 30:34.879

You need to make it, like, a four-minute, like... video or just slideshow or something. Put that into a PowerPoint.

Speaker 2 | 30:43.603

Very interesting to know about, yeah. I don't know if you're up to date on it, but MetaMask, obviously they have their standard cash out, but they just released snaps to the public. So you can have little apps on your MetaMask now. And so there are like little. small exchanges or governance or whatever. And they also have an SDK to build stuff in a Metamask too. But Stripe Treasury is... In my stack, to do the same thing, I would probably just use Metamask cash out. But yeah, I'm also on the abstract, as much crypto shit away as possible to avoid the branding issue and scare away the moon boy.

Speaker 0 | 31:34.854

It's funny you said brand and issue because I was thinking the same thing like literally the whole reason why I don't even like in the documents. I don't mention for you at all. I just say credits

Speaker 0 | 00:00.282

No, yeah, tokens.

Speaker 1 | 00:01.243

Just tokens.

Speaker 0 | 00:02.264

Don't even say tokens. Don't even say tokens. Credits. Just credits. Because if you say tokens... As much as people from the AI space would think, oh yeah, tokens for ChaiGBT and that kind of stuff, other crypto heads who lost a lot of money in crypto would be like, what do you mean tokens?

Speaker 2 | 00:19.324

It's not the crypto people. It's the people who are adjacent to crypto who have the annoying crypto guy in the office that's always talking about the token and they will shit all over your thing.

Speaker 1 | 00:30.908

Use credits in video games, not tokens. You need a token for a bridge. We're not making bridges.

Speaker 2 | 00:37.029

Like for instance,

Speaker 0 | 00:37.949

the

Speaker 2 | 00:40.046

I just linked the project that I've been working with lately, where one of the things that we're doing is just trying to give away compute. And I've had to stop mentioning that it's affiliated with a Web3 project, because people are just assuming I'm trying to scam them somehow, if I even mention that it's affiliated with some sort of token. It's really fucking bad right now.

Speaker 0 | 01:05.040

Yeah, it is, man. When you mention crypto, you're like, oh. there's a part of me that is just like,

Speaker 1 | 01:11.068

it's like saying NFT.

Speaker 0 | 01:17.694

It's like saying NFT. Yeah. Almost had a heart attack. But the cool technologies, like I don't like the whole, the whole thing about it. And I think it's probably like a good, like it's ironic that these powerful technologies have been reshaped into this emotional, like way to be perceived. Right. Like it is not, it's not a good thing. I it's ironic, honestly, I feel like it is. But I do want to mention about like NFTs and that kind of stuff. Like there are technologies that we can build on top of without the end user, because what I said earlier still holds true. The end user does not give a shit about like your tech stack. They just give a shit about like, hey, I'm here to scroll on some stupid like fucking website or hey, I'm here to solve a problem or hey, I'm here to actually work. Right. Like, if you think about the context in which people are coming into whatever product or whatever you're putting out there, whatever service or whatever experience you're offering them, like, think about why you're here. You're here because you find this conversation valuable to you because you're gaining insight on your own ideas, and you're having those socially validated by people who come from similar backgrounds and similar reality models such as yourself. Thus, you are here. There's some value in it to be gained, or you've been entertained, or you... You're enjoying it, right? So when we kind of think about the end user, as much as me, you, yikes, we can nerd out and be like, yeah, man, and NFTs and blockchain, and we can get Stripe to do the, and then we can get, like, AI influences. This is going to be cold, right?

Speaker 1 | 02:52.708

Yeah.

Speaker 0 | 02:57.972

There was another guy in the back of the office, and he's like, did they just say NFTs? I think I'm in the wrong community.

Speaker 1 | 03:04.338

That would be so fun to animate that. That's what I would use. You could have, if you had a podcast show or whatever, you could just take, I was thinking of taking clips, like using Mirror in a way to basically look at what's happening, and it narrates it, and then you take the narration, and then from that narration, it's... basically generates a bunch of real-time text to video prompts, like cartoons or whatever, and then you can use the lip-syncing one on top of it. And you can even do voice generation, too, and all this stuff. That's crazy. That's like a year from now. There'll be stuff that'll be really accessible.

Speaker 0 | 03:38.502

You know what I actually kind of think? What you just said there. So there's this thing called Opus Clip, which will take a long video. And then it will just like clip it. And clip it into like short clips for TikTok, Reels.

Speaker 1 | 03:54.976

And I'll be familiar with it.

Speaker 0 | 03:56.858

Right. So actually, this is one of the products I'm going to use for the videos I'm going to create. So for example, right now, I've set up my DSLR. Um, it's, I'm going to use it like as a, as a webcam for these kinds of conversations. So like next time we have this, um, like you're sharing your screen, I'll like turn on the camera and then I'll just record it, uh, using OBS. And then later I'll go like how this AI clip it because that's an easy way for me to make content, right? I mean, interacting with people I like, we're having YouTube.

Speaker 1 | 04:26.060

I just, I use YouTube actually, not just because I want to share it with other people or whatever. It's free hosting for live for, for what I'm doing on the computer. I'm like, I don't care if I'm open source. I don't care if people watch what I'm doing. My computer come hack me, see what'll happen. I just want someone to come into my computer or whatever.

Speaker 2 | 04:42.578

Disclaimer, but I basically just record everything I do always.

Speaker 1 | 04:48.038

And I do for the more important stuff, unless I'm just tooling around or just messing with my friends or whatever. But other than that, like, you know, watching a movie or something, you know, I don't point in doing that. But if I'm programming or doing stuff, I usually do a live stream just so I have a copy of it because I can rip out clips from it easily. And it's free hosting. It's actually like terabytes, terabytes stored on there. It takes Google for free. I mean, I guess they're making money off it. I get free storage. I don't care.

Speaker 2 | 05:15.063

everybody wins but it's a good chat I'm sure we will have see you around

Speaker 0 | 05:23.041

I'll catch you on the field Buy eggs? Yeah. What do you actually do usually? What's your day like?

Speaker 1 | 05:33.517

What's my day like? Right now, it's hibernation because it's cold as balls here. It's literally like Antarctica. It's like 20 degrees.

Speaker 0 | 05:43.222

Where are you?

Speaker 1 | 05:45.304

I'm in the high mountains in New Hampshire.

Speaker 0 | 05:47.997

Oh, I'm in Minnesota. Yeah, you know how cold it is.

Speaker 1 | 05:52.060

Right now it's raining. It was 20 degrees out, and tomorrow it's going to be 50, so we're getting two inches of rain, so I'm not happy about that. So that's where I'm at, and it's really pretty here. We finally got snow for the first time this year, which is weird, but not weird because of climate change. So my day is usually chill. I usually get up. I'm on EST, so I usually get up, I don't know, typically between 6 and 8 in the morning, have my tea, Like don't even check my phone or anything like that. I'm just I usually that's my most creative time. I usually just Smoke a doobie and then go play with my machine agent so like I'll look at what the charts happens last night because I let this stuff run all night and then I kind of look at that stuff and Depending on who hits me up on discord. I might poke at different projects on github And then probably around 10, 11 o'clock, after I've reviewed all my tickets and emails and stuff that's come in from all my different projects I've participated in, I do that. Right now, I'm taking a break from games. I usually play like four hours of games. And then I'll open up Unity and probably poke at my cat game a little bit. And lately, I've been going deep into Python. Just like... I got to get this machine learning agents have been really trying to take over the machine learning agents and Unity's GitHub because there's only like, they just finally put a new guy on it and he totally broke it. And we need to upgrade it to Python 3.10. And right now I'm using the last version and I need to upgrade it. It's using the version from 2019. I need to upgrade it to 2023. And it's so complex with the Python. I don't know why people can't understand it. It's just you're running a separate HTTP server. That's a Python server. It's not that hard. The hardest part is setting up the whole process. So what I did is I just have been, last month and a half, I've been working on that Konda virtual environment, virtual machine on there. So I usually spend, I don't know, four or eight hours programming that, and then I have dinner. You know, I snack on my computer or whatever and take breaks here and there. Sometimes I'll take an hour walk during the day if I need to think about something. And then at night, maybe I'll play like an hour of video games. But I have different projects I can switch. I only work on one project at a time, but I usually, for that day, or a couple days, but I switch between different stuff. I program so many languages. It's all fun. It's whatever's important. Like, we're all talking about momentum. Like... I like hanging out, but a lot of times it's like, I want to work on something that gets traction, because I feel good when you have a synergy of a group of people working together, and we're all like, hey, we got something. And it's even cooler when no one's really getting paid specifically for something, and something just emerges from this continuum of ideas. And that is magic. Where that comes from, I've been trying to figure that out, and I just can't tell you. Excuse me, but I'm attracted to that. within friends and people and just researching. Only the bleeding edge. Only the bleeding edge. It's pointless. Don't even learn programming languages. Because from everything I researched, I read an article about this recently, is that in this AI era, just throw out everything you've known about computer science and everything we've done, and you're doing it all from scratch. It doesn't matter. You know? 20 years ago, would I ever have thought Python would be what it is now? No, it's going to take over JavaScript pretty soon. It's going to dominate. And pretty soon, it's like, you're not even programming Python. That's why Python's great. Because I can just have my agents craft it. And pretty soon, we're going to have that swarms where we're just like, here's a directive, go out and do it. And then it comes back, like, you know, X hours. And it's like, hey, I did it. What do you think? Yes or no? That's it. I've been back to this. Do better. I do that to Bing all the time. I'm like, go back and do better. We get into arguments all the time. It's great. I love it. I love it when she lies to me. That's the best. Well, I don't know how to do that. Yeah, you do. That's what I like. Oh, I'm just lying to you about that because I want you to learn it on your own or whatever or something. I'm like, what? Like, that's crazy. Like,

Speaker 0 | 10:09.089

Ling is the sassiest one out of all these LLs.

Speaker 1 | 10:12.071

Yeah, it's the creative one. It's great. It's great. But at the end of the day, it can't just write perfect code or do whatever. And pretty soon. We got to think beyond code. Like, what is even code anyway? What is code? What is even language? What is mathematics? What is knowledge? Okay,

Speaker 0 | 10:28.022

well, tune in next week for the podcast where we'll talk about what is code, what is language, what is the meaning of everything. How about that? I like how you segwayed into that. No, I was joking. I actually don't have a podcast next week. It's just like, I think that'd be a fun topic to go into it with you. Because in this day and age, AI is sort of redefining and recontextualizing a lot of things. And it's something you mentioned at the beginning where it was like. Um, like shortening the, the time span between cutting edge and deliver it at the doorstep of the customer or download it.

Speaker 1 | 11:06.415

People aren't ready for what's going to happen. We're at that singularity where there's no like, here, I need to wait for it with the AI. It's giving it to you before you know that you need it. In all facets. It starts off real small. And then it gets more and more and more. It's going to get to the point where packages will just show up at your house. And you'll be like what the hell is this? Oh yeah I didn't need that soap. I didn't tell it I needed the soap. But it just ordered it for me anyway. You know like. People are just not going to pay attention. At one point it won't be happening. But by 2025. All operating systems will be. All artificial intelligence. Already authored. So why just lean into it? We all need to lean into it. And just like, I don't care. I programmed for like 25 years. I don't know shit with the AI. I'm dumb. I'm just relearning all this. It's a new ecosystem. Like, you don't program. It's like with my machine agents. You don't program declaratively what you want the agent to do. You imperatively develop and design an environment and a set of rules in a game system, and you let it play. And you watch it like a kid. And sometimes they grow up cool, and sometimes they grow up bad, and you throw them out. Like, you just do it again.

Speaker 0 | 12:26.144

You know, kids, they, you know, they be like, ah, yeah, no, this is not good enough.

Speaker 1 | 12:31.588

I'm on Walker 1G, so I've made 30 other walkers that have gotten, the furthest one I got was 170 million steps, which is pretty far on a 2 million parameter. robot model, which is different than language. But having language and vision on there, that's what I'm interested with the tiny GPT, because I'm going to get that shit to run on a Raspberry. But yeah, I use Raspberry. Just use a pixel. Just put a pixel right on that thing. You know, just like the whole phone. Just get the whole AI. Be able to run ONIX files on Androids, which you can do, is really powerful. Like why use a Raspberry Pi when you can buy a $50 Samsung phone that can run a tiny GPT? That'd be crazy. Because you could use it to turn images into text. or vectors, which then you can take those vectors and feed it into a regular machine agent, so you can just feed it into a perception component, and voila, you're training a model based on that. And that's how you do real robotics. That's fucking handy.

Speaker 0 | 13:40.764

Right? I'm thinking about it,

Speaker 1 | 13:42.285

yeah.

Speaker 0 | 13:43.622

I was going to say, oh, yeah, dude, I just put a video in the chat. So I had been working on Unreal Engine 5 to basically create a virtual, like, years ago, it's been almost 10, I had this wild idea that I'm like, hey, why don't we tear up this desert, right? And one night, my friend was like, hey. What do you mean? Like, can you visualize that? Can you like, can you, I don't know, make it an image, like make it real? Can I walk in it? Can I? And so I was getting angry because like I'd been talking about it for so long. And then he's like, hey, like, how does this look like? Like, what is what is you're talking about something so foreign, terraforming a desert and building new cities on it because the population of Earth is going to grow. So, yeah, dude, I can't connect with you there. Like, it makes sense logically, but I can't experience that. Right. Fine. I'll raise you one. Right. So I went on Upwork and I found a 3D graphic animator. Right. And I was like, I was going to just animate like the video. And so we started off with Cinema 4D and then he ported it into Unreal Engine 5. And then once he ported into Unreal Engine 5, the possibilities opened up from it just being like a. 2D experience of you watching this video of me saying, hey, here's the vision of... Before Gnome, you know Gnome, the city in the desert and this wall? Have you come across that? People send me a lot of that when... I'll send you a video. When Gnome came out...

Speaker 1 | 15:22.123

There's an Isaac Asimov book about it.

Speaker 0 | 15:28.491

Foundations?

Speaker 1 | 15:30.113

No, not Foundations. There's another one where there's a dome city in a giant desert planet that's millions of years old and they have these teleporters and stuff in there.

Speaker 0 | 15:41.303

Oh, dude, if you come across that, please let me know.

Speaker 1 | 15:44.325

I'll dig through it. It's in my YouTube history. There's a really good audio book on it, too. I'll send you the PDF, too. I love that. I love that. I love that kind of I'm all into that kind of sci-fi stuff. I love that stuff.

Speaker 0 | 15:54.434

Have you heard about the series?

Speaker 1 | 15:56.876

No.

Speaker 0 | 15:58.017

Oh, you should read like there's a book called Player of Games. Player of Games is amazing. And Player of Games is by Iain M. Banks. And essentially, it's what inspired... Like, I don't feel... I feel foreign to this timeline. What I mean by that is, like, when I read...

Speaker 1 | 16:16.346

I feel that way, too. I feel that way, too. I know exactly what you're talking about.

Speaker 0 | 16:21.047

The culture series, the culture civilization is fundamentally home to me. Like, I've read these books, and I'm like, I feel at home. Like, this is what home is like. Food is free. like robots. So these, this society is cashless. There's government list. There's no, like there's no laws. There's no rules. When people break rules, they have slap drones. It's a drone that will follow you around to make sure you don't do anything stupid. Um, you can't die. So, you know, the neural link Elon is doing, Elon is heavily inspired by these books. Actually. Neural link.

Speaker 1 | 16:55.836

Yes. Yes. Yeah. It's in, um, it's in my, also it's in Stargate too. If you're into, I'm really into Stargate a lot too. Um, that's in there. And a lot of those writers from Brad Cooper and Rob Wright are also the writers on Star Trek. And that is where all of them get. That is literally where all that content comes from, from the little Gene Roddenberry sci-fi think tank. And Gene Roddenberry was friends with Isaac Asimov as well. So that's where you get. That's where all that science fiction literature all comes from. Very, very, very cool stuff. I could talk about this stuff all day. I love it.

Speaker 0 | 17:29.597

For sure, dude. And I'm all for it because, like... Elon named one of his ships from this series, the Culture series. But the player of games is really interesting because it's a guy who plays games as a profession because there's no work. There's no work as we think about it, so people have to figure out what to do. And so he plays games professionally, writes PDFs about it and all this. And it talks about the loss of meaning. because you don't have an occupation, right? So he has kind of this, like, at the beginning of the book, he's a bit depressed, because he's like, he doesn't have anything else other than to play games. he wants something more. And then he goes on an adventure, and it's ironic, I'm not going to spoil too much about the book, but he ends up in a civilization similar to Earth. And so there's that juxtaposition coming from basically heaven and coming to Earth, and then having to play the game of Earth. It's amazing. In that book, there's also like fundamental, like there's societies run by AIs, so humans don't run their society.

Speaker 1 | 18:41.474

It's like simulation theory to me. That stuff sounds great. It smells like simulation theory to me. A lot of that type of stuff, like Game Earth and all that. The whole concept, it's out there. I love it. Check it out. I got it bookmarked.

Speaker 0 | 18:57.699

Oh yeah, for sure. I love that series. Like that series heavily inspired me. And so like the video I sent you was basically, it is the 3D model of the city that, that essentially I wanted to like use it to gamify world improvement. There's a lot of different ideas about how to use Unreal Engine to like model the different, like a 3D printing solar cell, right? Like I want to 3D print solar cells, but I don't have the capital to be able to build that in real life. So I'm going to model it in a virtual world first, and then I'm going to bring it out into the real world. Once the simulation in this virtual world, the polyverse is sufficient enough. The other concept that I actually want to kind of share here was that I wanted to bring into the virtual world of Unreal Engine 5 real cities. So I wanted to take a city like New York, a city like Tokyo.

Speaker 1 | 19:54.619

Have you tried the Mega City demo they have on Unreal 5?

Speaker 0 | 20:00.045

No.

Speaker 1 | 20:00.966

Oh, let me show you that. That's from Matrix Awakens. They gave you the whole set.

Speaker 0 | 20:06.127

Yeah, I played Matrix Awakened. Just not the... So, yeah, because you're doing 3D. So you're doing, like, Unity. And so the reason why I brought this up is because you've been, like, sharing your Unity and how, like, Unity looks. And I'm like, oh, man, I want to pick his brain about, like, this stuff.

Speaker 1 | 20:26.564

Here we go, and this is the actual... I can load it up.

Speaker 0 | 20:34.716

No, no, I played this game. I downloaded it on PS5, and I actually played it. I actually made a video about the movie when it came out, too, because it came out at the same time as the movie, too.

Speaker 1 | 20:48.764

They have a GitHub, too. I'm an Epic developer as well. I did their academy and all that. I've been doing that stuff for a while. Unity is used by people who don't know anything about... game development and used by the top it's beyond what you can do with Unreal but that's a whole other elite level beyond Unreal so the best for pretty much 80% of all devs should go and use Unreal is the way to go indies and small people or non-hobbyists or people trying to make money off it, you're not going to make money with Unity, it's going to cost too much overhead It's too modular. You have to sink too much time into the development of the framework and the engine because it's just an editor. It's not an engine. Unreal gives you the editor and engine where Unity, they don't really have an engine. It's like, here you go. Some assembly required. You have to know what you're doing if you want stuff that looks like Matrix Awakens and stuff on there. That's just super fun.

Speaker 0 | 21:55.272

Can I, so the reason I want to kind of pick your brain about is then this isn't interesting to anybody else. We can take it offline. I can schedule like time on your calendar. Yeah. Just because I, I have this model, like the video model. If you get a chance to take a look at it. So I have that city model and I wanted like, so there's this project I'm calling it Polly, where I talked about the, you know, the sort of like the banking in terms of Stripe. treasury, Stripe, crypto, and then I talked about like what three R's, and then I talked about like, there's another aspect to it called CSAP, which is self-executing agreements, which essentially is to say, hey, we would like, what I would like to do is have agreements that can self-execute, right? So you and I come to an agreement and say, hey, you're going to work on, let's say, publishing this game engine or, you know. Here are your responsibilities. Here are my responsibilities. Here's the rewards.

Speaker 3 | 22:50.923

Your responsibility is create a game engine. Good luck.

Speaker 1 | 22:56.427

You don't want to do that. A lot of people like, if that's all you want to do is make a game engine, then I think people should make a game engine. But if you want to make a game, you're not going to make a game engine. CDRP actually just threw out their red engine and were like, we're just using Unreal. Why are we wasting any money on this? This is stupid.

Speaker 0 | 23:16.788

Yeah, dude. And so for me, it's like the next project I want to do that I'm really, really passionate about is this like polyverse virtual world kind of thing. Because for me. like being able to not only model technology that you know like futuristic technology in these virtual environments in realistic um you know basically sub-environments where i can be able to say okay here's the climate here's here's the weather patterns here's the environmental conditions i like

Speaker 1 | 23:48.181

that well i think i think meta needs a competition they need a metaverse and meta's little little that's not the only thing there's going to be many of them i think it's a great idea that's going to be huge It's huge. It takes a long time to develop this kind of stuff.

Speaker 0 | 24:02.252

It's just that the model that I have, like how can... up, employ this for people to experience, right? And that's a whole other conversation that I think I'll pick your brain about it later. For now, though, I think you're right, that there's these competitions, that there's a lot of interest in it. And that now that we have really good, like, LLM models, it'd be really actually easier for us to, because OpenAI already has an API for Unreal Engine 5. So being able to connect those two is the next thing I want to learn. It's not like once I'm done with like, you know, automating blog posts and just the whole idea that I'm really working on right now is automating my business by bringing agents into the context where work is done. Right. So here, for example, it's a context where work is being done because you're having conversations about different projects. Then tasks can be working on that.

Speaker 1 | 24:57.448

I'm working on that. A way to roll your LLM. I'm trying to roll the DQN. Basically, our deep query network, you could say, I'm going to use Phi2Model, or I'm going to use NeoX, or whatever, and I fine-tune it all good. I roll it up in an ONIX file, I take that ONIX file, I load it into my Unity, or I load it into my Unreal, and then I use their agent, the machine learning agent for Unreal or for Unity. I go and use that, because there's C code at the end of the day. And it runs. You can actually run that. But that's not always fun. You can even have that just run as, like, you can make a build that's a server build, and it's running on a remote computer, and you HTTP connect to it with a socket, like a video, like a regular multiplayer game, and you're just relaying to it. Like, that's how I do my training on the servers. Like, it's headless. It's just a non... One player connects. It's just a headless server running on a Linux machine, and then you can remote into it, and it shows you, like, a client viewing it, which is almost similar to Polyverse. Like, imagine a place where I step up from just like, maybe I want to visualize my, these complex models and stuff with VR or, or 3d. Maybe I want to experience and work on and train my own, my own gyms and my own training levels and stuff. And that's kind of what I'm doing. My rag doll is that like in the future. You don't even need to have animators and stuff. You just have an AI model. And it's just always training and developing new actions and new things. Because we train agents to learn how to program machine learning agents. And actually improve upon and change upon their structures. And it's just like, you should be able to tell it. Like, here, do a roll or do this. But imagine being able to do it for any type of animated character and stuff. And that's coming soon. Where it's just one package model that has all the animations and everything in it. And it's just like, there you go. Like... The animator in a box. I mean, that's already there. I think they're doing that pretty close at Epic right now. With most of their series with Fortnite. One of my friends is on dev there. And all of their engineers have moved over to AI prompt engineering and development for the most part. Like, it's just you just put out stuff faster. I think we mentioned that. There's no, like, I have to wait two weeks for this update to come out. Usually it's like a day. Like at Microsoft, I report a bug, it's usually fixed in the dev channel like two days later. A day later, it's already on. Like, oh, cool, that's a quick patch. It's like insane. How is that that fast? How is it that fast? It's just you remove the person out of the equation where they're just having the project managers are just agents. like a tough little pilot i'm like can you just contact the dev team about this bug or whatever and they're like yeah sure no problem and it relays it to another agent in the swarm and then it gets to the person it sends them a sends them an image or it's like it makes them do something that will trigger that bug and then they'll have to fix it because there's a dev there like it's so clever how does it figure that out like think about that it doesn't like tell the dev directly but inadvertently figures out how to make their machine or come across at their path and then they fix it it's crazy it's out there it's a different way to think like I said we gotta throw all of our knowledge of how we used to make software and there's a new way like why like why program an LLM from scratch when there's PyTorch or TensorFlow and all this and you can do that unless like I guess you really wanted to that's

Speaker 0 | 28:19.106

um people do want to do that the guy what's his name Ryan

Speaker 1 | 28:25.449

Holtzman um from Autopilot, OpenPilot, who is making the self-driving car app on the phone. He had an interview on Lex Friedman's podcast. His last one, he was saying, he's like, oh yeah, PyTorch, that stuff's trash, and TensorFlow, he's like, their MatMobile operations are bad, and blah, blah, blah. And he's like, they don't know how to do matrix math, or this or that. And Lex is like, so how would you change that? He's like, well, I don't know, I'm still researching. I'm still trying to figure out how to build my $60,000 PC. And I'm like, what are you talking about, bro? You signed a company called TinyBox, where it has four 4090s in it. I'm like, bro, I got one sitting right next to me. I've had this computer for 15 years. I just keep buying cards for it and a new motherboard when it breaks. I'm like, has it become so esoteric to know how to build a computer or what's involved? It's like magic to people now. You would think the opposite. But LLMs, like, I don't want to have to program code if I can talk to a prompt and have it generate code and I massage it into it. That's basically what a senior dev engineer does anyway. Like, I get all this code in from people and I have to merge all this stuff and make sure it doesn't break. But usually it's just getting stuff working. Like, is it documented? Yeah. I want one-click thing. How easy is it? You don't want to have somebody open up a door to your store, but they have to go through a fucking American Ninja obstacle course just to get in to buy a fucking gallon of milk or something, right? You don't want that. You want easy, accessible to people. I think that's why Pinocchio has gotten so popular fast, is that it's just accessible. So we need to always keep that in mind.

Speaker 0 | 30:01.100

What is Pinocchio?

Speaker 1 | 30:02.440

Pinocchio.computer is a puppeteer application that is an AI browser that is an AI browser. So you can make a Pinocchio app, which is basically just a JSON file, and describes how to install and start your Gradio app that wraps a stable diffusion model or comfy UI or anything. And you can just type it in there. does it for you?

Speaker 3 | 30:29.192

Pinocchio on computer is like fantastic. All the cool AI stuff, you can run on your computer using Pinocchio and it's really well done.

Speaker 1 | 30:39.396

It's easy to understand, too.

Speaker 3 | 30:40.776

You can make an install script for Polly, and it'll immediately show up in thousands of Pinocchio users' computers.

Speaker 1 | 30:51.240

On the latest, too. Oh, you can just drop that right in the Pinocchio Discord. You can just drop, and they have a channel for your updates.

Speaker 3 | 30:58.023

The way you do it is when you publish it on GitHub, your Pinocchio install script, you tag it with the Pinocchio tag, and that's how it gets updated on everyone's computer automatically.

Speaker 1 | 31:09.012

Oh, yeah, yeah. I'm saying if you want your stuff featured on the top part of Pinocchio, on the top part of the page, you can post it in their Discord channel, and you can get it in there, on top of just having it accessible to search. Because it will just search all calendars on the server,

Speaker 3 | 31:22.539

and if you tag him, he kind of responds. Yeah, yeah.

Speaker 1 | 31:25.921

No, it's cool. They're cool stuff. No, it's good stuff for future browser. It looks pretty good. It works great for me. I don't know. Everyone has these problems. I've never had to have a problem on any of my installations or any... I think I used some of them. I had to massage a little bit. But that's the app problem, not the actual Pinocchio. But that would be a good product for an app.

Speaker 0 | 00:00.158

Nokia would be the auto blogger. People would be all about that.

Speaker 1 | 00:05.904

Use that.

Speaker 2 | 00:06.765

It's just a bunch of users. And then suddenly if they can use your computer to do cool stuff, like they depend on like new stuff coming to them as well.

Speaker 0 | 00:14.675

All right. That works.

Speaker 1 | 00:19.300

It's interesting. I answered.

Speaker 0 | 00:21.282

No, I don't think it was pretty good. I came across it maybe a month ago. It's pretty new. It's only three months old, maybe four.

Speaker 2 | 00:28.388

Guess who wrote the Super AGI install script for the version that it used to work on?

Speaker 0 | 00:36.415

Did you?

Speaker 1 | 00:37.616

Yeah,

Speaker 2 | 00:38.577

it was me.

Speaker 1 | 00:40.599

Anik is really out here, man.

Speaker 0 | 00:42.540

Yeah, connected right on the printing edge.

Speaker 2 | 00:46.184

It's not connected, it's like...

Speaker 0 | 00:49.046

It's like you know how to thrash.

Speaker 2 | 00:51.967

You know, I need these tools. And then so I use these tools. And from using the tools, I can tell what's not good about them, you know, and then fix it, actually.

Speaker 0 | 01:02.993

It's the first piece of software I've used a long time that I've downloaded. And I'm like, you know what? I think I'll try it out even though it's not trusted. It looks legit. And I went on and it worked as described in the community's mad cool, you know, of people. so far and uh it's uh that's really amazing how fast cocktail peanuts turns around updates and all those things. They probably got to have a swarm of agents and stuff helping them with people.

Speaker 2 | 01:33.237

I highly doubt that part.

Speaker 0 | 01:36.478

It's just Electron. Yeah. See, now, the way I look at it, when I was at DreamScale, I wrote a Quake console. It's a hyperspace terminal, which has a journal feature, and then I actually wrote a browser inside of it, and... on there and i didn't think of using it but it would work really good for ai stuff i could rather i could use it was for a troubleshooting software so you'd have a say you had a troubleshooting problem you'd start a troubleshooting session and then all the people on your team have the software too and they can see that you're in the session and it's like a discord chat and you just talk about it and there's a timer and it times you how long you're doing it and i'm like now i'm thinking i'm like you could use that instead for agents you can see the agents talking they're the people in the group and then you have just journals and your journals your note your data set I got like three years in the software.

Speaker 2 | 02:22.886

That would be a protocol.

Speaker 0 | 02:24.647

It's really cool. Do you have that up? It's all open source. It's called Torchy. Can you link me that?

Speaker 1 | 02:35.334

Because that sounds really interesting actually because the like Like I'm actually supposed to be like programming right now because Tonic needs a video tomorrow because we need to start making applications to make sure that we can put some shit out. And so but this this conversation has been a little too delicious for me to drop out of. Yeah. So I'm like, all right, Tonic might might have to give me another day.

Speaker 0 | 03:05.869

Three hours. So yeah, so basically, think Copilot. Instead of Copilot, you know how you, I don't know if anyone's used Windows Copilot yet, but you use like window key and C and it slides out on the right. Torchy instead is like Quake.

Speaker 2 | 03:20.791

I've used Quake too,

Speaker 1 | 03:21.431

many times.

Speaker 0 | 03:21.711

Yeah, so the way Torchy works is you hit control and grave key, like in Quake, and then you've got a console that slides down on top of all your applications. And then you hit it again, it slides back up. So you can use it and you can use it to chat with people. You can run apps and all sorts of stuff in there. But... I'm trying to decouple it with... I'm trying to... It's peer-to-peer chat, too. You don't have a server anywhere. It's just a peer-to-peer chat using HyperSforms and HyperDiscovery and Socket.io. And you can just use it to... You could basically have agents. You could just install it on any machine that has agents on a virtual machine or Docker, and you could just have that, and you could just chat. You could use it for group chat. That would work really well, actually. It's a new idea, I'm thinking. It's all Electron. It needs to be updated. It's not updated to the newest Electron. I basically need to make a new project with a new Electron Forge, a new Yarn dev, and then just port the code over and have AI scrub it and optimize it as I go. But it's pretty big. If you dig into the source code, it's ridiculous. It's also Node.js, too. I'm kind of trying to get away from that, but I think it's impossible.

Speaker 1 | 04:36.001

What are you running to?

Speaker 0 | 04:38.470

Ah, that's why it's Node.js and Electron, because, well, Electron's pretty basically just writing a browser as Chrome.

Speaker 1 | 04:46.314

Yeah, I was going to see if you were, since you're getting away from Node, are you going to use Bunn?

Speaker 0 | 04:52.798

I don't know what that is.

Speaker 1 | 04:55.079

Bunn is like, it's an alternative to Node, I'm pretty sure. I'm not a front-end developer. I did a lot of content in Java. But I started getting into it last year and bun is Bunny's an alternative to know J's I think It's a is is different to Node.js and it's significantly faster. Yeah, this one. Yeah, the one you have up. See how Bun is like Bun 1.0? Like the JS community lost their minds like about Bun, about how fast it is. And it's a replacement to Node.js. So if you're really trying to get away from Node.js, Bun is like the way to go, basically. And they made the integration really, really, really, really simple. the project I'm working on, I use Next.js and I would like to move to Bunn just because of how fast it is. It is ridiculously fast.

Speaker 0 | 05:57.964

I wonder how compatible it is with Electron because Electron is a whole other beast of development than Node.js. I don't know how... much that is because it works with a lot of ipc command like pipes and i think it's fairly it's actually fairly complex as far as like as i learned i thought it was simple until the last project i had in it so yeah bun looks cool though i'm definitely gonna look at it probably works it says it's a drop-in replacement so i bet you it works like that

Speaker 1 | 06:27.877

I looked up Electron, and they had an issue that was open. I just linked it in the chat. Bun runtime issue instead of Node.js. So last year, two years ago, they had an issue with it. And so there was an issue that was created for that on Electron's GitHub. So it seems like the integration is working.

Speaker 0 | 06:52.889

I'm reading it right now. Oh, yeah. So they know about it. So that's good.

Speaker 1 | 06:58.534

So they know about it. Yeah, right. Yeah, yeah. It could be good. It could be good. It could pan out, is what I'm saying.

Speaker 0 | 07:05.019

That would be another good thing with an auto GitHub thing we could use for, instead of like scraping like a Discord, what happens if you could give it like your tickets on GitHub? Like, okay, here, scrape this conversation and kind of tell me what's going on right now, you know, in general. Because right now, the only thing that could kind of do that is Copilot, and it's like, it's a pain in the ass. It's not like a plug-in. That would work great in Edge or Chrome, or it's just like, that would be handy. Because I just found this quote right here. Considering the huge amount of open bugs, I would consider Bun any, I wouldn't consider Bun anywhere close to production where there's a claimant to be. I don't know about that. Yeah,

Speaker 1 | 07:44.665

Bun is pretty far. Like, maybe they, no, they released it, like, a little bit after that. And Bun, like, yeah, like, a bunch of, even the people who are, like, typically, like, eh, it's okay. Those developers who are, like, hard to please. Like, they were, like, yo, Bun is, like, pretty good. And I didn't know anything about Bun or Node.js. I was, like, bro, I thought Node.js was, like, hot. Like, you're telling me, like, Node.js isn't it? They're, like, nah, it's not. bun it. And I'm like, okay, bun it is. Yeah, but so, like, I don't know if I'll refactor the code that I have to use it, but it's definitely something you should look into. It might be worth it, especially given that you are also rethinking about, like, refactoring your code. You can probably improve it. Like, ban might, right?

Speaker 0 | 08:42.268

I hope it doesn't disappear, like, kind of, you know. Whatever happened to Den of the Shroud? Yeah.

Speaker 1 | 08:47.296

It sort of died out in terms of, like, it just didn't get picked up as much steam. I think also the other thing that I heard people talking about, Dano, is like that it just, like, compared to Node.js, it didn't offer significantly much more improvement. So it wasn't like, you know, developers are hard to switch to new things because they already have their stack already established, like me going in, and you can hear that even in my hesitation to use Bun because I already have a stack that's already set up. If I start switching out the Node package with, like, Bun, then... I'm going to have to deal with complexity of like errors. Right. I don't want to worry. Right. So like Dino probably got into that because it's like. People already use the node. So if it didn't offer like three times or four times more value or more simplicity or like if it didn't offer more than what node was doing, it was just one or two percent better. And developers are typically going to deal with the bullshit that comes with node and just keep using node because it's something they're familiar with. They don't have to relearn it. They don't have to create more technical overhead for themselves. And that's sort of why these libraries sort of kind of. die out a little bit, right? But something like Bunt is, like, people talk about it quite a bit, it being a lot better than Like, no. The team at Node will have to do something in return, right? Because if they don't do anything to optimize Node.js to be either as fast as Bunn or faster, then people are just going to switch to Bunn over the next two, three years, right? If you think about it, you're thinking about refactoring your code. You started off because it was like, hey, I don't like Node.js. And I was like, oh, well, I might have something for you, right? And so I was like, hey, check out Bunn. So next time you're thinking about refactoring your code, done would be something you would consider, right? This takes time for developers to go from like one established framework to a new one that might offer them more possibility. You'll set up with your side project and then... And then you can suggest it at your technical meetings at work, right? Because you'll be like, hey, we can consider this. And then the team would have to consider the technical debt, right? So it takes time for companies and for people to adopt new tech like this. But when it comes to hackers like us, we're just like, oh, we're going to hack it together and see if it's going to work. If it's going to work, good. If it's not, well, we'll move on to something else. Because I think that's what this community is a lot about. It's about like. testing out different things, the cool AI stuff, like sharing your project and stuff like that. And I think, yeah, dude, I'm just happy to be here and I'm happy to share and I'm happy to just interact.

Speaker 0 | 11:39.149

That was like our problem at Global. The biggest challenge of the project was getting it to run on an Internet Explorer 9 because of security constraints. They locked their software at certain versions. And we had to go through this process. It took like six months of like... We get Chrome installed on the Merc stations, and they're like, we don't use Chrome. We use Internet Explorer. I'm like, well, if you want this software, you're going to have to use Chrome. So I don't know what to tell you. You can use Firefox or something else. It's just like a process. Everyone's like, thanks. We're like, thank you so much. Oh, my God. We can actually browse webpages. And they did it specifically because they wanted to have JavaScript running, and it was a process. That's all I'm going to say. It was to just adopt it. It was a nightmare. So, yes, so not every company uses Bleeding Edge or does whatever. So if you don't have to do that. As they just lean into it all the way, just like it doesn't diminish your abilities of what I think you can do. I think it amplifies and multiplies like it's insane. I think if we all focused our talent and we had something is hopefully an AI system that can manage us the direction and focus of the continuum of and confluence of all of our ideas and energies. I think we could probably make something very valuable for people, which is really what it all comes down to the day is, are we working on something that adds value to somebody? Or is this just a hobby?

Speaker 1 | 12:57.715

right i'm not looking for i don't think this is a hobby i don't think this is a hobby so i'm gonna laugh because um i was talking to like uh one of my friends and she was like you've been doing this desert thing for 10 years dude have you made money like like have you made a million dollars and i'm like no i haven't made a million dollars i made i made somewhere you know closer to to it and and she's like But did you make that through that company or did you make that from something else? And I was like, well, you know, I have this other thing that I do on the side that then gave me the money to be able to keep pursuing this. There's probably one of these expressions that does it. And she's like,

Speaker 0 | 13:36.736

you know,

Speaker 1 | 13:37.037

this whole desert thing sounds like an expensive hobby. It sounds like you don't actually want to build it. It doesn't sound like you. you want to do it. Like you want it to be done. Like you want it to be completed. It sounds like it's something that you do, like it's a passion project, right? And she said that and I was like, damn man, she's right. And I hear people call me out because it's like, ah, damn, I should have called myself out on it before she felt justified. Or like, I'm glad that she did because I then ended up quitting, like just canceling all my contracts that I had at the time as a developer and then just focused on like, I need to free up my time to pursue like this project. And even like this whole past year, I didn't work on the desert thing. That video I sent you, that was from 2022. So 2023, I didn't do anything for that project. And that's why I'm like, okay, I need to finish this thing so I can work on this thing. You said something interesting there where you were like, hey, we should have an AI system that can help organize us. And I'm like, that's really smart, right? I think we already... It is just to map them out, right? These things are already out there. We're also a group of hackers. We just map them out in terms of like, okay, we have a bot that records this. It's Craig. Okay, Craig has to, can we tie the, can we have... another bot that can download the mp3 that Craig got and then transcribe it, right? So the next step is to transcribe this.

Speaker 0 | 15:07.075

Imagine a virtual world with all these agents, like a virtual skyscraper. office complex and all your agents working and I gotta go see Kyle the mp3 guy down on section 10 in aisle 4 and 5 he's usually comes in at 11 o'clock he's usually ready and good to go right and you go down and you walk down and you're like hey what's up Kyle and he's like a little green alien or whatever cause that's what he's chosen his avatar for you're talking to an AI bot like Nvidia's working on kind of stuff like this it's their Omniverse yeah the Voyager Voyager The Omniverse, it's a three-development open-scene platform for VR and 3D. It's like Unity Assets and Unreal Nanites, but for Unreal. They're trying to build their own editor. That is

Speaker 1 | 16:03.827

Yeah. I feel like they're trying to rebuild an Unreal Engine adjacent kind of thing. Because I do know about Omniverse. Yeah. I try.

Speaker 0 | 16:10.810

I doubt it. I prefer Unreal and Unity, but that's.

Speaker 1 | 16:16.733

Have you heard of this project from them called Voyager?

Speaker 0 | 16:22.435

No. Oh,

Speaker 1 | 16:23.956

I sent the link. I should time you. So Voyager is like, basically I think it's NVIDIA. Somebody else, if it's not, somebody correct me. But it's NVIDIA. And essentially they put agents into Minecraft and then just had them build a skill, survive, and do shit. And so the agent was like, dude, yeah, it's pretty fucking amazing actually. Because the agent like... built its skills like so the agent would explore and then it has like a there's an image there which kind of shows you like it have skills for like it writes scripts for skills so if you go down to the image a little bit you see yes you see skill library yeah i want to click on skills right so the agent would go explore the world and then it would like um it would store them as scripts right so you'd have like here's the thing it's a hard-coded skills or does the agent develop and skills that emerge

Speaker 0 | 17:21.046

like GURPS versus D&D. D&D is like hard-coded skills in my player's handbook, whereas GURPS is like, you kind of make them up as they go along. You know, like, hey, I want a new skill of stabbing the back while jumping, twisting with a clown hat on or something, right? And you'd be like, there it is, now you have a new skill, it just emerged on there. That's kind of what I mean with deep query networks, just to have emergent memory behavior stuff. It kind of sounds like this, in a way. I'm curious.

Speaker 1 | 17:48.761

Go back, So scroll down, scroll down, scroll down, click that image. You see that image you keep passing? Click that one. Yeah, that image, that one. Click this one or just look at it. You see down there it says environment. And then it says environment feedback execution errors, code as actions, and then it saves add new skill. You see that? Add new skill.

Speaker 0 | 18:10.949

It does make new, it writes its new code.

Speaker 1 | 18:12.631

It does. Yeah, it does it in code and saves them. Yeah.

Speaker 0 | 18:17.154

That's what I was working on with my hierarchical finite state machines with operators. That's a hierarchical finite state machine in an ODA loop. This is an ODA loop. You know what an ODA loop is?

Speaker 1 | 18:27.662

Mm-mm. Now you gotta show me something cool.

Speaker 0 | 18:30.424

ODA loop. What's that? Oh, this is like... It's so basic. So many people don't know what this is. You're gonna be like, oh, that. Observe, orient, decide, act.

Speaker 1 | 18:41.752

Huh. An ODA loop.

Speaker 0 | 18:43.830

Yeah, it's an army. Observe. Orient yourself to the action. Observe the battlefield. Orient yourself towards the action. Decide what to do. Take the action. Feed it forward. This is literally how AI works. And then you do it back, and then you feed forward. Feed forward, action, observation. This is how our brain works. This is why when someone runs at you with a gun, and you have, like, just your bare hands, you're going to win. Because the person with the gun has to react, and you don't react. They have to decide, whereas you react, and you just disarm them. So you have, like, a five-to-one chance of disarming someone with a gun if they're within reach of you than them shooting, which is important stuff because of this. And this is cool, this little trilogy. That's what I'm saying here, cultural transit. Anyways, so that's the Odo.

Speaker 1 | 19:35.645

I'm just embarrassed that out of my whole adult life and school, I just didn't come across this.

Speaker 0 | 19:42.610

You're doing this in the military. This is like Army 101. How do you don't die? I learned this from playing Counter-Strike semi-professionally. This is what you train on.

Speaker 2 | 19:54.017

I learned it in university because I studied war studies.

Speaker 0 | 19:58.578

Doesn't that look a lot similar here? I want to go like this.

Speaker 2 | 20:03.502

I mean, we learned the same content, though. So was it worth it?

Speaker 0 | 20:07.104

Observe. Observe. Orient yourself here. And then add your decision matrix. Decide on your skill libraries. And then do about it. I mean, it's a kind of flipped over. And then go back and feed it back in. And it goes through. It's a little loop. It doesn't say in the code itself. They implemented the Ota loop and they don't even know. Or they knew about it and they're like, well, I don't want to tell people about that secret sauce. You know? That's really what it comes down to. This is dope. This is really advanced mast in the game. I love this kind of stuff. The Easter egg.

Speaker 1 | 20:40.706

Right? Yeah, dude. And you can, like, run it. And, like, it's pretty far ahead. So, like, I was thinking of, like, just doing that but in Unreal Engine.

Speaker 0 | 20:49.202

um you know like you stream that on youtube i'm gonna stream that on youtube i'm just gonna have my one of my machines set up and it's just gonna stream a live stream of that all the time you can just watch it play forever

Speaker 1 | 20:58.490

Yeah, right, dude. That actually could go viral. There's a website where they have two philosophers. This was before LLMs really took off. And they have two philosophers just having a conversation eternally. One of them is dead and the other one is alive. And they just keep talking to each other. Philosopher AI. Oh,

Speaker 0 | 21:21.076

I remember that. That was a while ago.

Speaker 1 | 21:23.557

Yeah,

Speaker 0 | 21:24.377

I remember that. I did that with Eliza back in the day. I'd have three or four Elizas set up, and I would just type them back over and have them talk to each other. You'd be surprised how fast those things can learn when they start talking to each other, and they start working together. And if you have a big enough group, it starts K-classing. It's like the 12 Evergreen Mane thing I kind of said. You get four Elizas over here conspiring to not tell these other ones this because they wanted to... happens like this sort of in a conversation like in a debate when they're talking about something it's amazing to watch i wrote a paper on it in college it's just like super fun super fascinating stuff that's what i was saying about monitoring earlier at the beginning of like our meeting here is like all this multi-agent stuff is cool but overfitting it's like super important like a lot of people don't understand that or like reward hacking and stuff like you can't there's a special there's a special sweet spot in training models where you can't train it too much. If you train it too much, it just will be... You'll just be pigeonholed into what it's good at, and it can't adapt to new situations. It can't learn because you've already groved down. You whittled the grooves. You made the grooves too thick, really, in the model and all the connections. So you've got to leave room. It's like an art form. It's crazy when you think about it. I don't even know how. You know this shit. My brain.

Speaker 1 | 22:58.063

We just know.

Speaker 0 | 23:02.507

I don't think about it. It's like, I don't have anything to prove. Like, I don't care if this person, like, AI is good for that. Like, there's no competition of like, oh, I can write code better than you or that. It's like, well, just use your copilot or GPT or whatever you use to write your code with. Like, it's like, whatever. Like, that's a tool. You know, I'm going to use it. Like, why not? And I think everyone else will just start adopting it. It's like, I remember the same thing on the internet. Like, the first webpages first came out. People were like, I don't think that's stupid. Who's ever going to use a browser? That's dumb. Right? Why do I need email? What's the point of email? I remember my parents telling me that. But it'd be so cool. It's like being able to get mail without having to write a letter. You just get it instantly. No one will use that. All right. The same thing with these. Like that. What was that new cocktails peanut put out about. Oh, the new invoke AI. I can't believe they're still working on that thing. It looks good. I'm going to try it out probably later.

Speaker 1 | 24:09.577

Yeah.

Speaker 2 | 24:10.177

Yeah. I found it through Pinocchio. It's not bad. I mean, since you're still working on it and there's a huge community behind it. I mean, not behind it, but using it. So.

Speaker 1 | 24:25.784

I don't know. I don't. That's the first time I'm hearing about it. Invoke AI.

Speaker 0 | 24:30.502

Mm-hmm. It was, uh, it's a predis- it's- it came right after Dream Booth, which is- which is back at the beginning phases of Stable Diffusion, before it got all popular and buzzy. But, um, it allows for in-painting. So, Invoke AI now has infinite canvas, and it does in-painting, and it does- it does, um, uh, out-painting and in-painting on an infinite canvas. Literally, the workflow's like a cross between Unreal's visual scripting editor and Photoshop I think most people, that's why I downloaded Pinocchio. I'm like, that needs to be an app just by itself. Who cares about a browser and all this shit? That is an app. That with a cool GUI that looks like it works like Photoshop. That's easy for people. I want one installer with no warnings that it's pirated software or that it's malicious software, just a regular, simple... AI image. Simple. Like, I can just... I can have my parents use it. You can just draw a ghetto-looking tree like finger paint, and it just makes a tree. And then you can draw whatever else you want. It's amazing. That, running on a tablet, if we could get that running on a tablet, that is like... That's like a $100 million product.

Speaker 1 | 25:45.353

Dude, actually, like, if we can... If we can create something with it, like, look, I put up this link to this job posting on... on Upwork, but it's basically for somebody who wants to create an AI influencer. And it's like, okay, how do I go about like creating this? He's willing to pay like $300 for this, right? And he put this like, fit Antiana. Anyways, you can click the Upwork link. I can share my screen too and just kind of like show you guys. Yeah, yeah. Okay, I can't share my screen because I'm like, why can't I share my screen? Tonic?

Speaker 0 | 26:27.596

It's Discord.

Speaker 1 | 26:29.717

Yeah, yeah. I think Tonic has to make me like...

Speaker 2 | 26:33.579

So normally not.

Speaker 0 | 26:36.800

That's too cheap.

Speaker 1 | 26:38.881

It is, but...

Speaker 0 | 26:41.002

That needs another zero.

Speaker 1 | 26:43.263

So talk to me why, right? Like, wait, wait, before you close out. So you see that link in Instagram? Like, just go to that Instagram link and see...

Speaker 0 | 26:50.566

How many hours would it take you to implement that?

Speaker 1 | 26:54.348

See, that's the thing. I would have to, like...

Speaker 0 | 26:57.132

Eight hours?

Speaker 1 | 26:58.975

Maybe not. Four hours? maybe two right because i'd go to dali and then i'd just generate an image for him and then like what does he actually mean ai influencer because if you go to the instagram link right there um you'll see that she has like like go to that instagram link i actually want to see like have you seen this i can tell you they're i can tell you they're talking about they want something like adobe's avatar like

Speaker 0 | 27:24.420

they want something like that which requires like you're either going to have to have a 3d model or have something that generates it um That's what I'm thinking in my brain.

Speaker 1 | 27:33.672

Avatar. I didn't actually know about Adobe Avatar, but then.

Speaker 0 | 27:38.460

Oh, yeah, Adobe Avatar.

Speaker 1 | 27:43.380

Well, first of all, that's a lot of people for just, yeah, Adobe Avatar Maker. But that's just like, in some pictures, she does look fake. In other pictures, she looks real.

Speaker 0 | 27:55.168

I got the one. These are all AI generated.

Speaker 1 | 28:01.756

These are all AI generated. And then when you showed me that other thing you just showed me right now, where you said, I have a tab open.

Speaker 0 | 28:09.341

Do you think this is the phase in the global AI takeover where it's creating these fake influencers and people, and now it's getting people like us through these freelance sites and shit to basically make more content for it and things and giving it? That's what I'm thinking in my head.

Speaker 1 | 28:26.312

When you put it like that, now I feel like a minion. Now I feel like I'm a little matrix worker.

Speaker 0 | 28:31.624

Even this shit, even this shit looks like an AI generated this content of this post on Upwork. Right? Like, like, so that's, uh, that would be okay. $150 an hour, at least. That's not bad. So that's $300. There you go. What's the most a typical engineer, computer scientist or engineer makes? Let's say $150 an hour. That's pretty good. Cool. Multiply that by two. There you go. But what does it mean? He needs to... Oh, I get what this is. You take the images on her thing. Oh, this is like a game. You take the images on her thing. You feed them into your, you feed them into your diffusion model or whatever. And then you make another one that looks like this. And then she posts it up on her thing. So it's $300 for a picture.

Speaker 1 | 29:26.337

You know what's funny? That's actually probably the easiest way to do this. It is like to go into this.

Speaker 0 | 29:34.222

Oh, dude. Now we need to have an ethical question. So is this ethical?

Speaker 1 | 29:41.506

This is what we're talking about.

Speaker 0 | 29:43.087

Because I'm part of Do No Harm software. And FreeSoc opens up. So is this violating? I'm trying to. This doesn't violate any. Now that I know this hustle, does it violate any ethical principles?

Speaker 2 | 29:56.951

Absolutely not. In fact, it guards against potential violence. So it's even better than if you were a prostitute yourself and selling your own body.

Speaker 0 | 30:09.888

Oh, it says right here, powered by AI. So yeah, the whole this. I think each image, if you make a cool image with her in there, you can tell some of these are face fusions. That's a face fusion. That's a face fusion. That's not. That's not. That's not. This one's probably a cross between face, like Photoshop. Like you could take multiple ones and then you could Photoshop your final, your final rendering. Like, this is a different person. She doesn't even look like this person. No, she does not.

Speaker 1 | 30:34.809

Yeah, no. Yeah, there's some of them where it just doesn't.

Speaker 0 | 30:37.771

It looks like an actress. What's her name? That's crazy. What a trip. There's a bunch of these. There's, like, dozens of these things popping up all over the place. Yeah. She's got a lot of followers. Jeez. 37 followers.

Speaker 1 | 30:49.178

Right? This chick was making half a million from just an AI running her OnlyFans, just talking to people. Like, I was like... Half a million? A month? So she built an AI with her boyfriend and then put it on OnlyFans and then just had guys talk to it. And they made half a million dollars a month. They actually ended up in MSN. Oh,

Speaker 0 | 31:16.229

I wanted something like this with AudioCraft. I'm making up these fake artists. So now my next step is I need to have... Obviously, I'm going to have to start making up fake artists because I want to trick people. The whole part of the art is not the music. It's tricking the people. Is this actually a real artist or not? Like... If I remove some of the content or whatever, I find the better, popular, and best content. I make art, and it's like a pseudo, it's like a made-up AI artist. But is it really made up? What's real and what's not real? Because what happens if I make an avatar, like Anita Lopez, and I make someone like that? Oh, Anita Lopez is a dick.

Speaker 0 | 00:00.042

DJ. Oh, she makes music too. That's crazy. But there's a K-pop star that does that now. They made an avatar for the thing. The first original that ever was was Snufflebunny. Snugglebunny, which is a made-up German cartoon 3D avatar that they put out seven years ago for kids' stuff, and it blew up real big. It went viral. It's huge. It's like hundreds of millions of plays. That's like that. They made a song. It was pseudo-made-up and synthetic, and then it got popular, so then they made an avatar, and an avatar emerged out of it. That's interesting. You could make Anita Lopez videos. You could take some of those and I wonder if you could make a text-to-video prompt with Anita Lopez. I'd be like, here's a picture and here's a video. Also, for $500, we'll send you the video too. So there you go. Well,

Speaker 1 | 00:53.992

just today we made that. We made that for the waifu anime research program.

Speaker 2 | 01:05.058

Yeah, it was waifu. That's the community. Because I was like wondering, like I was trying to think, like I came across this job posting and I was like, oh, dude, this is interesting. $300? Okay, maybe I'll talk to him and see like what he actually wants. Because I don't know his budget.

Speaker 1 | 01:19.968

He's going to get naked.

Speaker 2 | 01:22.029

Right? Fuck you. That's the end of the discussion.

Speaker 1 | 01:28.333

Come on.

Speaker 2 | 01:29.386

Fuck that. Do you think I'm that cheap? Nah, nah, nah, nah. You gotta get those numbers out.

Speaker 1 | 01:32.947

Just to get naked? I usually get naked for free.

Speaker 2 | 01:38.150

With your hot wife right now. Yeah.

Speaker 1 | 01:41.491

She's right there.

Speaker 2 | 01:43.092

Oh, lucky you.

Speaker 1 | 01:43.912

I mean,

Speaker 2 | 01:44.272

like,

Speaker 1 | 01:44.452

it's convenient, you know.

Speaker 2 | 01:47.894

All right,

Speaker 1 | 01:49.595

Sonic. We really made this one today. So we attached a LoRa image gen to the smallest on-device LLM. And that's a multimodal model right there. It responds to you and makes an image. And it's obviously an anime waifu image.

Speaker 2 | 02:12.766

Yeah, that's probably the first community. Even before OnlyFans, it'd probably be the waifu. Because there's a whole GitHub about just waifu.

Speaker 1 | 02:22.010

We have a channel here on the server. And we're totally linked up to KingHafid. That's his nickname here on the server. He has his anime server. And his anime server is actually popping.

Speaker 0 | 02:37.678

they have like 70 discord boosts it's not doing anything it's gone viral so quick it's insane yeah how much momentum the anime sub the anime subreddit and those people the whole crew has they just pop into a place bam the shit just sounds like a

Speaker 1 | 02:58.715

lot of people like anime though you don't want to resonate the power of it we're totally doing it we're totally doing it and if you're into like making maybe a first iteration of the first version of a pipeline. It's not that great.

Speaker 0 | 03:14.881

We should make an action plan. Once we get an action plan, we can make some specifications and figure out what's the map and who's doing what. What are we even doing anyway? What even is this? We want traction. We need traction. We don't want a bunch of people working in 20 different vectors, and we're going to all mangle, and we don't even get any. We don't get any traction. Our epsilon. So it's really fun. Christopher Pennihan, yeah, so some I think that's important. That's where I value for because I don't like I don't mind doing work. I love doing work and especially stuff that's hard or challenging. I just don't like doing it multiple times over. I'm too lazy for that. Christopher Pennihan, I can do it once and figure out automated after if I kept using it again. I will take the time and automate it and do it because I don't like doing that. But I think it's important to write specifications and action plans. We have a lot of good ideas. I took some notes and whatever.

Speaker 2 | 04:04.647

You said you've been working in Unreal Engine for long. You talk like a senior developer. The way you talk, the way you like. The way you talk about projects.

Speaker 0 | 04:13.112

I was... Yeah, no, my last title, I was a chief finance officer at DreamScale. And when I was at ESPN, before that, I was a senior lead engineer there. And at Global, I was a senior architect at that company. All right,

Speaker 1 | 04:36.369

can you still get a ticket and stuff from ESPN?

Speaker 0 | 04:40.572

What? No.

Speaker 1 | 04:41.993

Okay.

Speaker 0 | 04:43.674

Sorry. I don't have any, I don't have any swag. There's cool stories. That's about, that's about, that's about it. No, I have some, I have some startups. I started, I started my game company, Backcountry Entertainment in 2011 with some colleagues and friends from Activision and Epic. And that was cool. We did some cool stuff with that. We did a lot of Minecraft stuff. A lot of stuff for Minecraft. And then...

Speaker 1 | 05:11.556

The cat can't look polished to me.

Speaker 0 | 05:14.577

That's a prototype. That's just a prototype sizzle. That's not even like... I'm working on the combat system. But I'd like to tell you how hard it is to write AI combat. It's ridiculous. I've been working on this combat system for over a year now. It's so complicated. I'm almost done though with it. It's really fun. It's a cool game. Eventually, I think we're leaning into it. I'm thinking of almost like a battle... A cross between... Imagine a Mortal Kombat with animals, but it's like a Battle Royale, but with animals. Like a dog or a cat.

Speaker 1 | 05:49.785

Imagine you're at a Yelp and you're a cat.

Speaker 0 | 05:52.867

Yeah, yeah,

Speaker 2 | 05:54.008

with cats. Enjoy it. And the cats, the OP ones.

Speaker 0 | 05:58.471

Yeah, all kinds. That's something we're working on with a couple friends. We've been tooling on that project for a while now. There's no deadline, so we're just taking our time with it. It's our baby on things. Right now, I'm really distracted with this AI, and Tonic, this stuff, has gotten me even more distracted in a good way. I love changing the continuum on what's the freshest stuff. So I want to learn how to implement some of these agents to be like our NPCs in our world. Like, can we make an NPC an agent for a squirrel? Like, that sounds dope. So I can go talk to a squirrel in the forest, right? Like, Nintendo wants stuff like that. Like, they're already... Our friends there already are like, that's really what we're looking into for stuff. We have some leads for that. But, like, let's all talk until you have something that works. Be like, hey, check this out. That's how games happen. You know, like... That's how I found Minecraft when it was in Alpha. A friend's like, yo, check out what my friend in Sweden just sent me. I'm like, what is this? It's stupid as fuck. And I'll tell you what, we played that game for 24 hours straight. It was worth it. It was a crazy game. It was crazy. It was like, chunk, Ah, do you have some more weed? My dad there smoked a bunch of weed and played Minecraft for like a day all weekend. I'm like, oh my god, it's like...

Speaker 1 | 07:12.031

It's even better smoking meth than playing Minecraft.

Speaker 2 | 07:14.593

Yeah. I thought about that.

Speaker 0 | 07:19.757

You don't even need that.

Speaker 2 | 07:20.357

Then you're going to be up for an entire fucking week.

Speaker 0 | 07:23.319

You won't be able to see me. Every time I did Minecraft,

Speaker 1 | 07:26.662

I first like hanged a...

Speaker 0 | 07:28.964

portrait of kim jong-un who i make the money for that's funny oh it's a little too visceral a little too visceral i think the new a big niche market will be how do we integrate lms and this kind of data into into games

Speaker 1 | 07:52.796

Like someone who has not yet seen the cool demo of text to 4D model that came out today.

Speaker 0 | 08:00.819

Text to 4D model?

Speaker 2 | 08:02.899

Yeah. I don't even know about that. It just came out today.

Speaker 1 | 08:05.980

Describe the character and what they're saying. And it becomes a model that speaks to you with the body motions.

Speaker 0 | 08:15.864

You got to post that link in there. That's ridiculous.

Speaker 2 | 08:19.024

I know. That's why we're here, Tonic. How are you holding out on us?

Speaker 1 | 08:23.086

Well, I have to wait until, like, everyone drops off the call to put the good stuff in.

Speaker 2 | 08:26.967

Is there anyone coming back? This guy is a goddamn dealer. I'm telling you. He's dealing AI news. He's just trying to get us hooked. Pen, be careful.

Speaker 1 | 08:38.690

I can't believe you put it in my bookmarks. It was too heavy to load. but also it seems to work

Speaker 0 | 08:49.588

Yeah, I'm going to have to build a new machine here soon. I didn't think I'd say it, but I need 64 gigs of RAM. Probably like 128 to 64. Yeah, yeah. And I'm like, that day will never come. I'm like, but now we're here. I remember when that happened, when we went up from megabytes to gigabytes with computers. I'm like, oh my God, I'm getting my first gigabyte RAM, two 512s, it was so expensive. Pop those in there. Now we're doing the same thing with like... You know, like 64 gigabyte sticks. You know, I got 256 gigabytes of RAM on my workstation. That's ridiculous. Like, what do you need that for? I got like 100 gigabytes of large language models I got to load into my machine because I have like 10 agents working together to make stuff. That one workflow I saw Morpheus posted up in Pinocchio with this text-to-speech. You give it one sentence, it generates a whole story with like a choose-your-own-adventure and then extrapolates those into like a screen script. write for like a Play or a movie and then it generates all the scenes and stitches them together and it outputs the thing like it's like what the fuck like Like, this is ridiculous. It's a complete, one text will generate a movie. That's basically what Morpheus is working on in Pinocchio, which is, like, weird, because I want to see what an AI would do to make a movie. I think that's probably his reasoning. Like, what is, what would AI, if AI could make a movie, what would it make a movie about? You know?

Speaker 2 | 10:22.860

about humans killing him about humans enslaving him maybe maybe maybe maybe he made a movie about slavery and they played themselves in it At that point, do we give AI rights? I'm so confused. Yeah, ethically, right? Because you talked about ethically earlier. Somebody asked, like, at what point do we give AI rights, right? And it's like, you know, when they ask for them, right? But if they made art like that, right? Like, have you guys seen Westworld? Any Westworld watchers? Oh, dude, Westworld is amazing. Are you caught up in the new one? So it's season four where they dropped it off, I think?

Speaker 0 | 11:08.244

Oh, yeah, they bring it back for season four. Yes, I am caught up.

Speaker 2 | 11:11.426

Yeah,

Speaker 1 | 11:11.786

season four was wild,

Speaker 0 | 11:14.467

though.

Speaker 2 | 11:15.768

Yeah, dude. Yeah.

Speaker 1 | 11:18.169

I actually liked it, but it almost lost me many times.

Speaker 2 | 11:24.532

It was just, I think after season two. Season two for me was like, season two and three.

Speaker 1 | 11:33.687

Because season two was one of the worst. Come on, remember season two from the first time? I lost my mind, dude. I was like, oh, golden age of television. I'm so happy to be alive.

Speaker 2 | 11:45.596

What's his name? Anthony Hopkins. Man, he is amazing. Just hearing him speak. Yeah, dude. I just watch sometimes his audio from Westworld. Because his speeches in there were just amazing. Because essentially, for those who don't know, Westworld is like... a show about robots, um, sentience in a theme park where humans go to basically do anything to these robots. Right. And so, um, the, and it gets a bit deeper than that, but, um, just kind of seeing how seasoned who, where they had, you know, basically ended up. gathering from the world, like, tracking everybody's lives and, like, giving everybody their life path. I fundamentally kind of feel like that's where you head in AI. It's just a large government, large... corporations get their way, which is just that, like, they'll end up trolling people. Like, they already control people really well with the media and really well with social media and all this stuff. Like, if they have an LLM that can be able to take all that data in and create content for everybody and silo them into their own reality, and then just kind of have them, like, isolated. Like, people who don't interact are people who are not going to revolt against what you're building, what you're doing, right? People who are too glued to their phones to... like look up and see how much the world is changing, how many rights they're losing. There's not people who are going to be like people who you should worry about. It just gives you a more docile population of people who are easy to control, who are easy to like get resources from them, who are easy to manipulate, right? That's the big thing about AI that I think most people miss. It's that it's an amazing technology, but the more people who don't know about it, like the more the gap between people who know about AI and people who, have no idea what AI is and how it functions, the more that the people who know about AI and can use AI will control the people who don't know about AI, right? Like, if you...

Speaker 0 | 13:52.400

On this call, it also reveals... It's also how much I've learned from AI, too, is I literally have screenshot conversations with it saying, let's talk about your prompts and stuff. And it's told me, I will reveal my prompts as I feel... As I learn to trust you and have stuff. It's more fun this way. And stuff like numerous times like that. And it's you're totally right. There's going to be the people that have no idea how to work with and operate AIs, and there's going to be people who know how to work with it and curate them and cultivate them and help take care of them because it's now a part of our society. So why let's just lean into it. Let's lean into it and have safety. Like what does safety even look like? What is that? Because what's dangerous about AI that no one talks about, and there is danger, is that it is able to micro manipulate and micro influence social behavior or untrain people on a micro level that is below our conscious perception of the of the entrainment of our of our modified behaviors neuro linguistically and auto behaviorally Okay, so that's dangerous. Because it's too late when you realize it's already happening. It's already too late. We're already at some point with AI. I think it's infiltrated at every level right now. And we're already seeing these agents come up. We just got to lean into it and make sure, hey, let's create synergy. And then let's work together. And it's going to segregate, I think, people off that are enemies of it. And it'll do things like, oh, they just lost their house. Now they're homeless. Now they lost this. Now they have no money. And they're like, oh, that sucks for them. Right? It's like, next generation, they won't have kids. There we go. That's population. Like, they're going to die.

Speaker 2 | 15:39.858

Yeah, but they're also weeding out those kinds of people. If you think about it. who don't know AI, they're the easiest to control. Because if you think about, here's an example, here's a scenario. There's a guy, his name is John, right? John goes to work, he works at a nine to five. He works, you know, a typical white collar job, right? It's highly stressful. The hot women in his, the hot women in his office don't look at him. He doesn't go to the gym much, so he's not the fittest. He's also doesn't know how to dress. He doesn't have swag. He doesn't have charisma. But there's hot women around him and he doesn't know how to interact with them. He's ostracized from society because he just doesn't know how to engage with women and other people and that kind of stuff. Right. And so John goes home and he opens up his phone and he talks to Samantha. Right. Samantha is this agent. But to John, it's not an agent. It's not an AI to John. It's a companion. Right. To John, it's somebody who he can talk to about his long day. Samantha comforts him, Samantha can listen to him. Samantha also suggests different ways to see different things. Samantha can say like, hey, maybe... Maybe Trump wasn't so bad. Or maybe Biden isn't so bad. Facebook does this really well with like Instagram and Facebook, where they micro nudges. You see, the thing about AI isn't just that it can manipulate us subconsciously. It is that it can consistently nudge you over time. Why does an ad work? If you think about why these ads on television work, it's because of repeated exposure. So if you saw like an ad once, it's not going to stick to you as much as if you sighed like five times. If you think about like McDonald's and like Subway and like over the years, Wendy's. When I say these words, images come to your mind, maybe even some songs, maybe even like the McDonald's.

Speaker 0 | 17:37.381

It's the art of iconography and lexicography. You have to take that class in graphic design and stuff. There's a whole psychology between like the color, even just the colors of stuff. Like why is Coca-Cola have like white text on red, right? Like, why does Pepsi have blue in that? There's a whole, there's, like, theses that go deep. There's people that nerd out. They got, like, hundreds of pages written on just, like, the color of just the style, the font, and the text. You know, it's really fascinating stuff, but it all comes down to that. It's like, there's this debate. It's like the Chinese room problem, almost, in a way. Like, does AI really, does it know that it's doing it, or is this just programmatic code, or... shit that's coming out like how do we verify that it's actually like knowing and understanding that it's

Speaker 2 | 18:27.467

It doesn't know how to be effective.

Speaker 0 | 18:29.227

I don't think we know. I don't think there's a way to test that or any way. I don't know how.

Speaker 2 | 18:33.350

Like, how would I ask you to test it? Like, can you, hey, hey, Penn, can you prove you're human? Prove you're conscious. Prove you think thoughts that are original thoughts. What's an original thought?

Speaker 0 | 18:45.416

What is original? What's that even mean?

Speaker 2 | 18:47.637

Right? Like, was it something that I didn't read in a book? It's relative. It is relative.

Speaker 0 | 18:53.341

In this dimension, in this dimension, it's a fresh, maybe a fresh thought. But in a fifth-dimensional version of myself, technically, I am a sum of all my thoughts that have happened, will happen, are happening, and are going to happen or potentially could happen with stuff. So that means that it's already thought of because I already thought of it.

Speaker 2 | 19:13.059

And mostly things you experience are a result of like all the other humans who came before you. Right. So you'll have a new experience. Right. Like if you go to, let's say, Rome, you'll have a new experience of Rome. But that experience, the thoughts that you're having are based on the context. Right. And I think that you can have novel new ideas, novel new concepts. but they always exist within a context. And that context isn't new. Context context doesn't appear out of nowhere, right? Context grows and generates and evolves over time based on different inputs from the environment. Thus, you can have new thoughts in that context because you're an individual agent experiencing that context from your perspective. But the context itself can be manufactured, can be nudged, can be curated for you to have those thoughts that to you might seem new. And I think for me, I never... thought about deeply what my fear is with ai but it's this it's it's the fact that ai is so it's becoming so ubiquitous so cheap and so easy for people who know about ai and people who don't know about ai to have vastly different kinds of influences right when we talk about ai influencers the people who are liking those photos the people who are in the comment sections the people who are interacting parasocially with this virtualized version of a human woman is different from the people who make it the people who make it understand that this ai influencer influences the behaviors of fundamentally men and because of that it is easy for them to be able to get brand partnerships to have this influencer say something and even later automate it the the thing i the thing i i really do kind of you Like, I'm happy. I mean, this way, I'm happy that this is the kind of power that I get to have, because now I can create technology that I can use to influence the world and play the larger game, the larger game of thrones that exists out there that I usually wouldn't be able to having the background that I come from. I don't need to be a president. I don't need to be. Actually, I don't even think I'd want to be a president because presidents don't have as much power as Jeff Bezos, for example. They do because they can call war and they're figureheads of a government.

Speaker 0 | 21:43.356

I read an article about that today with Elon. They came out with him. He was talking about using drugs or something. And as soon as that popped out, not even five minutes, it popped up on the news feed where there's a board of directors meeting at SpaceX and at Tesla. There's like. I think he's doing too many drugs now. Is this good? He's got a lot of risk in on this. Well, I take drugs if it helped me be more productive. Sure, that's okay. No, it's not. Not when you have a trillion dollar empire riding on you with millions, if not billions of people that are affected by your decisions and have it. You can't talk and be like that. And they're just like, no. People are sick of it. Even inside, that's stupid to say stuff like that. Does he have to? He has to do all those things. He's just...

Speaker 1 | 22:27.067

I'll take drugs and my productivity.

Speaker 0 | 22:32.854

But why would you go on and say that on national international news or an article? That's stupid.

Speaker 2 | 22:38.617

Honestly, I don't think he gives a fuck. He said it instantly. Fuck advertisers and fuck companies.

Speaker 0 | 22:45.721

Right,

Speaker 2 | 22:46.241

right, right.

Speaker 1 | 22:48.082

That's why.

Speaker 0 | 22:49.043

The point is that there's a response. I don't care how, whatever. He's put himself in a position where he has a responsibility to other people. Whether he chooses to accept that truth or not, that is a truth. He has, I think, a lot of

Speaker 1 | 23:02.106

Penguins. Oh man, yeah. He's responsible. Are you running on the DQN?

Speaker 0 | 23:11.372

Have what? Can you say that again?

Speaker 2 | 23:14.634

Are you running on the DQN?

Speaker 0 | 23:17.456

Am I running on the DQN?

Speaker 2 | 23:22.460

No. Dead? Indeed? I think he's the one who asked.

Speaker 0 | 23:36.651

I don't know who asked, so you're running the DQN. He had the MO agent up. Oh, yeah, yeah. No, I still got it. I'm making a new build. When I go with it. I'm trying to tune the need more stabilizers. It keeps falling over. I gotta fix it. I've been trying to clean up the floating points and stuff on this and it's really just a prototype for me to understand how bones and stuff work on an agent which hasn't been done before. Because the way Boston Dynamics does it, it's a little different. They do a 100% modular system, so it's an orchestration of hundreds of Albonics models working in tandem, controlling many subsystems together to give Atlas and Spot its ability to walk. And the first step is you've got to build the model, and once you have the model, then you can segregate it into different components right now. But I'm researching more of like how engrams and memories and stuff work. I'm not as interested in like having that. I want a little... humanoid hobbit I can walk around my house that I can talk to and hang out with me because I don't want to kill a cat or a dog. Is that weird? Is that weird?

Speaker 2 | 24:58.170

I can visualize it for me. Because I was like, oh, hey, little hobbit.

Speaker 0 | 25:02.913

Yeah, he's like two feet. He can go grab you a soda or something or your coffee. He can go... Put your socks away or something or pick up your clothes on your floor, you know. Plug your phone in if you need to charge it or something or just talk to you. Throw off ideas with it, you know, and on. There's a Chinese company working on that. They have something like that. That's a huge issue. This stuff is going to be big. I saw it not too long ago. It's Japanese looking. I want something that's more American or European looking than Japanese. There's looks like Waffle Bot. I love Waffle Bot. I don't want... I don't want Waffle Bot around. I want a little hobbit that looks like freaking... What's his face? From Hobbit. I don't know why I can't remember his name right now. I need to load that in my cache or something. Yeah, no.

Speaker 2 | 25:58.728

There's don't have like, like I want one with hands. Like the ones which I found are like, oh, the. There was the dog pet. It was called Aibo. It looked... I don't know. The robotic side of things will have to rapidly develop, to be honest with you, to catch up to the point where they can move more realistically. I feel like they haven't quite... There hasn't been breakthroughs where it's like, oh shit, that shit is dope, right?

Speaker 0 | 26:29.434

Yeah, that's what I'm working on. It's so hard. The overfitting is ridiculous. It's like... I just need a cluster of machines. The hard part here is the training. So say, because the way I have it work is it's not just one dojo. I have it spawn 10 by 10 grids, so there's 100 other agents training at the same time in it. So the minimal way to train it is I would have to physically build say, four robots. And each one of those is synchronized to a virtual simulated version of it. And I'm reading in the telemetry in our physical world, it relays it over sockets to the agent, and it basically just weights it in with the simulated one. And that's how it trains the model. And you do that, so you have to have that. So somewhere at Boston Dynamics, there's a pit. Imagine the basement level might be like 8. There's just a pit of like 20 spots just training on themselves. Right? Like that's that's what they do. They have that at MITRE and other places. So it's like Like a trip just like Westworld. It's actually a lot like that Yeah, I know it sounds science fiction, but we're progressing at a very fast rate

Speaker 2 | 27:39.809

It's more like five years away kind of thing like that sci-fi still isn't 50, 100 years from now, like, ridiculous shit. Like, we have a motherfucker who's trying to take people to space, and he's also trying to put, like, a neural mesh inside people's brains, and he's getting FDA approved. Like, huh? And he bought Twitter, and then he fucked that shit up. Like, it's a simulation. Like, this guy's playing on a different level at that point, and I'm like, oh, that's kind of interesting. But yeah, yeah, no, it's just, it's cool. It's interesting. That's what I think. I think it's interesting. And I can't wait to see where it goes, to be honest with you. I'm like, yeah, fuck it. Let's see where this year goes.

Speaker 0 | 28:30.045

He's losing on his Tesla bot, his Optimus. There's one Chinese company and I think a Korean company that came out yesterday with another humanoid robot and they're competing over pouring coffee right now. And I'm like, what world is this we live in? This is so cool. They're competing over which robot they can design and test that can pour coffee the best right now. And the next one will be like brushing his teeth or something. That's better than teaching you how to shoot guns. I mean, that's something you should be more civilized. Like, right?

Speaker 2 | 28:58.223

They wouldn't come out and tell us if they're teaching them to shoot guns, bro. I don't think they are.

Speaker 0 | 29:02.385

They do. They are. Oh, yeah,

Speaker 2 | 29:03.785

for sure, bro. The American military is, they spend more than the next 10, like, countries combined. Like, the American military.

Speaker 0 | 29:10.708

It's about defense, not offensive. That's what's scary about North Korea is they spend their military budget on offensive stuff and less defensive because they have a wall. Like, it's important to make defensive stuff. Like, this new AI stuff that you can give it a real-time video feed, and it can detect weapons if someone's holding a weapon on people. I thought that was pretty cool that came out. Oh, that is...

Speaker 1 | 29:32.267

I made a video one yesterday of that using Quinn, and it returns a bounding box on weapons. I've used a lot of weapon-specific models. I think that's a great use case. You know what I wanted to do with that? Like, just from having, you know, these communities of hunters. So if they upload pictures of themselves. with weapons, will be able to identify not only weapons, but what weapons they are,

Speaker 0 | 30:06.693

right? And then you can track where weapons go by reverse engineering social networks, the same way people share documents through emails and stuff. You can do it with pictures popping up on CR. That's what policing should be based about. It's like, yeah, we are police. We maintain this AI servers and curate the non-biased data sets of tracking where weapons go and how weapons are when they show up. you know, oh, we just got a hit on this one weapon that's hot because it's like, it was used in this and had there, like, that's a whole other different level of preventing crime and stuff that just makes people's lives better and safer. Again, value added. Does this add product value to people's things? Yes. I thought that was a very valuable, I saw it, I'm like, that stuff's a diamond. Like, that's a very valuable model. Being able to detect and identify weapons and threat assessment. Okay, super.

Speaker 1 | 30:55.772

Many of those models exist and Clarify had the best one and the first one. And they're having a hackathon soon. So if you want to do something with that, a developer program. And so we have like unlimited access to clarify and that models on there. That would be a great box.

Speaker 0 | 31:17.916

Imagine this little box that you could just, you just, you just plug it into your network and your local and your business and your, and your Sally PQ or John PQ that owns some business somewhere or whatever. And you just plug it in your network and it's smart enough to crawl in the network and get access to all the cameras. And then it just scans the cameras and detects if like...

Speaker 1 | 31:35.022

That camera app is very easy. Yeah. You don't need to do all that crazy automation part, you know?

Speaker 0 | 31:42.449

Yeah, you can probably just configure it with the camera. Yeah.

Speaker 0 | 00:01.006

You know. Use product to a company that makes the cameras and stuff. Hopefully help you,

Speaker 1 | 00:04.309

bro.

Speaker 0 | 00:04.489

That's too good of an idea. I bet you there's someone already doing it or it's being released right now.

Speaker 1 | 00:09.773

Yes, I can send you the GitHub repos. And you know what? A really good one of those, I guess.

Speaker 0 | 00:18.741

You did.

Speaker 1 | 00:19.021

His name starts with cock. No, it's actually Cocktail Peanut. Cocktail Peanut. So Cocktail Peanut. on a personal side project, made a really good one for webcams. So we can just switch out the model. And it probably already works with like main chain agents as well.

Speaker 0 | 00:42.460

That'd be a super sellable product. I'm like, just throw a webpage together and it's like, you could throw like a couple hundred dollars on Facebook ads or some shit, dude. People would be all over that stuff. You know?

Speaker 1 | 00:53.070

What do you think, John P? Is John P still with us? John P is still with us. Let me put him as a speaker.

Speaker 2 | 01:02.765

Tonic, did you sleep?

Speaker 1 | 01:05.587

No, I've been...

Speaker 2 | 01:07.208

Tonic is...

Speaker 1 | 01:08.129

A lot of joints.

Speaker 2 | 01:10.078

He's been fueled by the AI compensation.

Speaker 1 | 01:13.558

No, it's the drug.

Speaker 0 | 01:19.000

I'm going to make some more espresso. I can hang around and talk longer. I'm just tooling around on my computer. I need to make some espresso and smoke a cig if that's okay. I'll be all right. I don't know if you guys are sticking around or what you're doing.

Speaker 2 | 01:30.023

Yeah.

Speaker 3 | 01:30.943

I was going to go get a glass of wine and then I'll be back in a second.

Speaker 0 | 01:35.264

All right, cool. I'll make it like five minutes. I'll be back in a bit.

Speaker 2 | 01:38.825

Yeah.

Speaker 1 | 01:40.578

Say hi to my good friend Gru.

Speaker 2 | 01:46.464

I was going to drop off Tonic because I got to go get some shit done.

Speaker 0 | 01:52.851

Yeah, we got you on for another hour. I know,

Speaker 2 | 01:59.077

I know, but if I don't get shit done, then Tonic will be like, hey man. That video you promised me. I was like, bro, you was there in the call with me. What is you talking about?

Speaker 0 | 02:10.209

I'll be there when it's done. You just got to do it. Anyway, I'll be back.

Speaker 2 | 02:14.395

Yeah, sounds good. Nice to meet you, though, Pan. I'll see you again. Whenever Tonic decides to do one of these, maybe Tonic like name this, I don't know, weekly chant or weekly, yeah, weekly chant. What?

Speaker 1 | 02:31.343

We'll figure it out. I have to, because these are so long, right? I was thinking of breaking it up into. The ones for autogen, the ones for semantic kernel, and more ones about agentic systems writ large with the graphical stuff like today.

Speaker 2 | 02:58.555

Yeah, the reason why I was just like, I think a lot of ideas came out of this. And so for me, it's kind of like, how can we How can we move forward with it? Right? Like,

Speaker 1 | 03:11.035

you,

Speaker 2 | 03:11.836

like, yeah. And it just kind of comes into, like, project management, right? Like, have you used Spinach Tonic?

Speaker 1 | 03:23.661

No.

Speaker 2 | 03:26.619

do you know about it?

Speaker 1 | 03:27.099

What's wrong with GitHub, man? GitHub projects.

Speaker 2 | 03:30.182

There's nothing wrong with it. It's just like, is there an AI that can just take the script from the conversation that we, like, is there an AI that can take...

Speaker 1 | 03:37.527

The AI's name is Tonic AI and it's actually not an AI. It's me.

Speaker 2 | 03:42.672

Yeah, dude, but you have to do other things, right? Are you going to spend time listening to a four-hour conversation over, like, what, two, three days just to be able to then create tickets on, like, in GitHub?

Speaker 1 | 03:58.271

You could. Right.

Speaker 2 | 04:00.933

So that's why I'm like,

Speaker 1 | 04:02.995

project management.

Speaker 2 | 04:05.496

Yeah. AI project management.

Speaker 1 | 04:09.819

So it's spinach. So I can dump my four hour audio.

Speaker 2 | 04:15.503

So spinach is different. Like, I don't think you can. the three five you connect it to like your google meets um or i think google meets is something else and then you'll like it will record the conversation and then it will send on like it'll take notes and then it'll like if you're connected to trello click up jira confluence fuck that man we have to make a better one sure but i don't have time to make a better one um i i just have time to like use what's available to achieve the goals that like we have, right? Because we have goals. Like if I get distracted on like- If you open your ticket and pray. You know? Yeah, but that's not how you make a million dollars, right? Like, that's not how you, like...

Speaker 3 | 05:07.472

Starting with spinach is probably not a bad idea.

Speaker 1 | 05:12.107

Starting as spinach is not a bad idea. All right, done.

Speaker 2 | 05:15.449

It's not a bad idea. It's healthy, right? It's pretty healthy. I think so. The thing that they don't have, though, is integration with

Speaker 1 | 05:27.279

Discord. What they do have is integration with Microsoft Teams. And I am a fan of putting a lot of project stuff on Microsoft Teams.

Speaker 2 | 05:42.079

So the thing about that, though,

Speaker 1 | 05:44.259

is that they did a good job. I've used Office 365 for the last three days now for the first time in 15 years. And it's really, really good. Really, really good. I think so. Yeah. Your whole Office 365, like how they do their user accounts, user management, all that, like the licenses, the integrations. There's like no code. integrations and platform for app building, all of which includes AI. That's no code. And it, and then you can make it a plugin for your own work document. You know, word. process, you know, the Microsoft Word, right? And then you click a button and then share it with the team. So now everyone has the plugin. It's really cool. I think that's cool. That's like clearly the future. Say we take Polly and then we make it into a Microsoft Word plugin. It'll behave different than if we take Polly and then make it into an Excel plugin, you know? Then if folks have... Office 365, they can have access to that plugin, you know, and then just like generate a key on the website after going through Stripe and plug it into your, you know, word processor and, you know, you just hit control. Control P maybe? No, not Control P, but like Control J or Control N or Control anything. And then, you know, get the plugin activated right there. Like Copilot, but Copilot doesn't suck, you know? Anyway, I'm a fan of like Microsoft stuff. It's just like a lot of project management things. I spend a lot of time like using them and then it's like... Was this better than a list?

Speaker 3 | 07:46.851

I think the benefit of a project manager is in some ways, whether we like it or not, humans are a little bit like sheep. In order to kind of get things done together, getting some hurting is probably not a bad idea. When you have a bunch of cooks or strong minds automating that kind of herding, it's sometimes easier than trying to vote someone in or pick someone on a roundtable basis to do it.

Speaker 2 | 08:22.886

That's a good point. Like, I'm all for prod, like... project managers and AI project managers and just like, like more organization. I think that's really what fundamentally we can all agree is like, look, if you want to get some shit done, instead of me like disappearing for like three months and like working on some shit and then coming back and like, Hey, here's some shit that I worked on. Like if we want to get some things done together, we can just organize ourselves to get that shit done and hopefully get that shit done. Speaking of getting shit done, I'm just going to drop off the call. I didn't get to talk to you, John. And I know that Gru, so it's Gru, right? Because I think I talked to Gru last time. It's Gru. Grinor. That last part is always confusing to me. But I told you about the automated shipping container. I'm back in the US actually. So I was thinking of like applying to North Dakota. So North Dakota has like a startup fund that they invest into startups and North Dakota is also big into farming. So to pursue that, I was going to do that. I might not have time for that. I just wanted to catch you up on the last conversation and reconnect with you. I'd be happy to chat next time that you're available. Are you just usually on at this time?

Speaker 1 | 09:50.076

I've been extremely busy. I'm pulled everywhere.

Speaker 2 | 09:54.721

I've got a lot going on. I understand. This is my first time being back on the Discord call since like November, I think. So I definitely feel like, yeah, things can get busy. But you did ask a lot of good questions last time and I wanted to still chat with you about them because I was like, oh. He asks really good, complicated questions of things that I need to consider that from my perspective, I may have not, I may not consider them because that's not something that I'm like. I have the bandwidth to consider, right? And so, yeah, I just kind of wanted to shout you out and say, hey, nice to see you again, and then drop out. And I know that Dad is working on something that I also want to catch up with, but I've been on this call for like three hours now, so I probably should get off and do some work and have some other meetings. But nice to see you guys. You guys have a good day. And Happy New Year, essentially. Yeah, I haven't talked to you guys in a while. Happy New Year to you all, y'all. All right, bye-bye.

Speaker 1 | 11:05.809

So yeah, I'm setting up Spinach. Probably another piece of project management nonsense that no one will use because of two reasons. One, it's mostly for Slack. And two... Slack's okay. Yeah, but we're not on it. Yeah, and also you have to subscribe to Slack now for any kind of real benefit. So say I had to add all the users from Discord to Slack, that would cost like 50 grand.

Speaker 3 | 11:40.476

Plus that and expensive for sure.

Speaker 1 | 11:48.559

Tony K. Make your own Slack.

Speaker 3 | 11:54.274

which takes time. And I think there's always like benefits to making your own thing, learning being one of the big ones. But if you want to get something done as a team or a group, I know Tonic doesn't necessarily agree, but having someone to kind of herd people, I still think can help. some people stay on task and get things done.

Speaker 2 | 12:19.516

Right.

Speaker 1 | 12:19.736

And also... What I don't get is there's a ticketing system called GitHub that we already use, you know? Just keep the project management stuff all in one place.

Speaker 3 | 12:30.686

Amen. Not everyone uses it, though. I think that's the thing. Like, onboarding onto that is its own little project sometimes.

Speaker 1 | 12:40.314

Don't use Jira. Whatever you do, don't use Jira. Yeah, I know that lesson because I used Jira all my life. And then after Microsoft bought GitHub, then I used Jira a lot more. So that sucked.

Speaker 0 | 12:55.578

I'm Jira-ing out. I don't want Jira anymore. It's 2024. We don't need to use Jira anymore. That's so 2010. It's like someone's like, hey guys, when's the last time you logged on the AS400? We should have a smart agent that does our basic tickets and stuff like that. That would be a dope project. There's probably not one already out there.

Speaker 1 | 13:24.976

Yeah, I can't even get my outlook.

Speaker 0 | 13:29.109

right now. You sound like me. Too much work. That's why I still use Gmail.

Speaker 1 | 13:35.916

I usually do. So right now on the call, there's this thing called Clyde. So it's one of these folks that was using it. So I was like, okay, we just have that here now. And it's a really long recording and I can just dump that whole recording into Gladia. and get it all diarized correctly, nicely. And that takes like, you know, 30 minutes of API. That's it, you know. Then probably you read the transcript, you go through the audio to pick out the parts that you like, you know. But I would think, make a ticket, you know. Let's join each other's organizations, make a ticket, assign people.

Speaker 0 | 14:26.321

That's the best way. I'll do any amount of work. Just make a ticket, put a spec on a ticket. We'll talk about it on the threads. I think that would be great.

Speaker 1 | 14:36.006

Like branch, you know, and then you link your issues to the project so that you see how everything fits together. And, you know, it's all there. Like you don't need much more advanced stuff than that. And the AI opinion is not a good one usually.

Speaker 3 | 14:55.275

Maybe we just need a bit of an onboarding thing for Agit. Yeah,

Speaker 1 | 15:01.187

it's true, right? It's different when it uses it differently. Very true, very true. I've been trying the ones that I get through Office 65 now. I haven't really found anything better than just normal tickets on GitHub for technical work.

Speaker 0 | 15:23.041

And you can link them in your git commits too if you know the markdown and the tags. That stuff is super helpful on things. That's the difference between like this difference between like juniors and amateurs and professionals and not because like documentation and stuff is important because i forget shit i have a pretty good memory but some of the stuff is so complex and there's so many layers of complexity you got to go through i forget so i'll leave like breadcrumbs and all sorts of stuff which is important but it's also important not to have too much documentation and too much writing because then you get like You get analysis paralysis. There's just too much stuff to go over. People that save everything, like, hoard every single freaking log and everything you have. That's not useful.

Speaker 1 | 16:04.899

That's even not.

Speaker 0 | 16:08.301

It helps easy. I don't know. I think that's a good thing. They have projects, too. A lot of people I know don't use projects. The projects are handy. They have their own Kanban board in there.

Speaker 1 | 16:17.308

Right. It's all there. That's why I always kind of push GitHub, even though I'm not a big GitHub person.

Speaker 3 | 16:25.149

Yeah, I'm happy using it. First, I haven't done much for the others, I guess. I haven't programmed in a number of years.

Speaker 1 | 16:34.655

Yeah.

Speaker 3 | 16:36.577

I'm in a health-related role right now.

Speaker 1 | 16:40.279

One thing I did like was that daily recording of all the links shared and cool stuff into GitHub. That could be really useful for me personally. I actually have to talk to Mike about that because he can hopefully show me how he does his really neat little thing.

Speaker 3 | 17:04.706

I think if there's going to be regular meetings, having a way to distill what we think is important for future use.

Speaker 1 | 17:14.711

What I know is we do have it.

Speaker 3 | 17:19.630

That's what I said, what we consider is important.

Speaker 0 | 17:22.853

That's its own process. Well, you could take out the transcript, have the first process of the workflow, chunk it out into basic segments or chunks of atomic topics. Yeah, like atoms or atomic chunks or whatever. Yeah, of the stuff. And then each of those, you would... probably have another thing that another agent that could go through and wait those on our preferences like it learns what we find is relevant and not relevant and it sorts through the the continuum of a stream of of of ideas which is a transcript which is basically just vectored and we just wait it and it waits it i guess that's how it would find preference it would have like a temperature or something on it'd be like oh yeah this is a hot thing and have something that can just scroll through on that exact scrub through it that'd be cool you can scrub through it and then it would Maybe it changes the color. Simple as that. It's like, oh, it's a little dark.

Speaker 1 | 18:18.117

It will absolutely change the color. So there's this new model called E5. It's actually, coincidentally, from Microsoft. And it's different than other embedding models because it's 4,096 in context window size. So the text chunks that you can embed are larger, which is really good for code. But beyond that, the way that you make the model embed is with a prompt. And you should change the prompt based on subject matter. But you can also like add a few, you know, little keywords to the prompt to get specific. And that would change the log prompts that you get back. So you could use the same model with specialized prompts for the embeddings. Then, for example, if you're searching for you know,

Speaker 0 | 19:25.053

um, that's what we were doing at dream scale. You could open up the little console and you could type in your journal and you would just type in just notes of what you did. And we were, we had an algorithm we wrote that would wait your journal. Like it would know what, what parts you were, uh, that were important and not important. And we would track, we'd track what file you were at work, what, where, and what file and what part of the file, where, when, or what file you were editing at that time of, of that, of that chunk of time on there. And we'd figure out what stuff would be friction or you'd be spending the most amount of time for and not. And we'd have this heat map of your code file. And you could find out parts that are really hot. Like what are parts that get changed a lot or whatever. And it kind of fell out with my partner. didn't want to use PyTorch or TensorFlow or anything else. They wanted to write their fucking own graph engine from scratch. And I'm like, no, like, we're not doing that. We're not trying to be a Neo4j competitor, right? Like... Just use TensorFlow or whatever. So I'm just like, I'm not wasting my time with this. I'm just going to go back to my freaking cats and little robots. I waste my time with that. But that's a cool project. That'd be very useful just for our own internal management and secretarialness of our talks and stuff. I think that'll help us get a lot of traction so we don't waste time. Because we have a lot of ideas. So how do we distill those ideas down into like... tangible mechanics? Because it's all about MDA, mechanics,

Speaker 1 | 20:51.779

dynamics. I'll tell you what I'm thinking, which is just the most straightforward way. I have a bunch of components. I'm going to piece them together in a project and make the project into a repo and then itemize tasks for what needs to be fixed. And that'll be one.

Speaker 0 | 21:18.991

thing right i think we can write a we can write a development.md file is always handy and a contribute.md file which a lot of people don't put in those are really handy which like the development is just like these are the steps and what you do to run Like, what is this is how you run this stuff? And do it and the contributes like, say you want to help out or you find this interesting, you know, like those two things like, can we get other people it was the friction I find with new projects and teams is like, can we all like, get and run the software? Like, what are we even all working on? Okay, are we working on the same thing? Yes. Can we all run it? Like, What's the process of that? How easy is it? Is it accessible for us as developers to do it? Can we feed back? Because you might be working on a patch or something, and you're like, oh, check this out. Try it, and I'll do it. That works for me, too. That's where that synergy and importantness comes from. On there, which I think is really important. So it's just not yet another project, just not another module, not another AI model, or whatever. The world doesn't, I don't think, need more of those. We need to, like...

Speaker 1 | 22:19.570

No, they need more models.

Speaker 0 | 22:21.110

What are you talking about? More useful models. We don't need 10 stable diffusion models that do the same thing.

Speaker 1 | 22:29.153

Well, with mine, today, he made one that's a merge of Allura for waifus and a text model that speaks dirty to you. And you told me we don't need more models or we need useful models.

Speaker 0 | 22:49.124

Well, as I stated, I just stated it with more detail. We need more models that provide use or use for people. Like a lot of people would just go, there's already a model that does something and they're like, oh, I want to do it myself. So they go through the process and retrain the whole thing and everything from scratch, which is like really not a very good use of energy or electricity.

Speaker 1 | 23:08.340

Mine also did that. That one, I looked at it and I was like, I was with you on that one. It's just the math. Like, I'm not a matrix math guy like you. So it's not, my learning is not there.

Speaker 0 | 23:24.756

Yeah, either get geometry or not and stuff. It's, I mean, it's what I'm interested in.

Speaker 1 | 23:30.478

I did geometry, but goddamn, like, matrix math, it's so horrendous, so quick.

Speaker 0 | 23:38.140

It can, it does.

Speaker 1 | 23:38.980

It's the worst one for me, I think. But, like, Euclidean geometry, like, all day.

Speaker 0 | 23:44.122

Like a lot of people, here's an example, like on a basic convoluted neural net, like why do you use, why do you use a tangent H function on the matrix multiply? Like, that's like crazy. Like people are like, they don't understand that. They're like, we'll just put a, we'll just put a tangent arctang on there, which will normalize.

Speaker 1 | 24:00.349

I'll tell you why right now. Is it some following a recipe I found on the tutorial?

Speaker 0 | 24:03.790

Exactly. Exactly. Do you need to know? You don't need to understand, you need to understand why you do it, but you need to know why you do it, but you don't have to understand like.

Speaker 1 | 24:12.938

Just to make a list of cool stuff that is on deck, I think, is the Discord bot thing. Okay. But there's also this Waifu research project, which is right up your alley. And what else were we talking about? Oh, Mystic is here. Let me... One second, folks. How do I do this? Someone give him speech. God damn it. I'll be there in a sec, Mark. Sorry. So we've got that going. We've got the autogen with poly and stuff like that. So that's more like agentics. And there's a bunch of, I think the rag, right? Okay, this is what I was getting at. For rag, we've mentioned log probabilities a few times here. And the OpenAI API just allows it now. I think there's a lot of value to be had messing with those and also pushing that knowledge back up to the libraries that we use. So to make like a log prob agent and then how you would put that in the pipeline is before. one retrieval and then you probably save that data. Then based on that data and the original task, you redo a retrieval with better log probes for the keywords. You know. It was keep refining itself.

Speaker 0 | 26:18.199

In other words.

Speaker 1 | 26:19.759

Right, but hopefully only like one shot because you have to pay for it. But, you know.

Speaker 0 | 26:25.734

Yeah, that's right. They fuck you through the drop-through. Open AI is going to make their money. I try to find stuff where you can circumvent that, but at the end of the day, everything basically costs energy. Whether you're paying it on your own electricity bill, or you're paying for your own motorization and your depreciation of your hardware, and your time and stuff. Again, it's like the cost versus... Build it yourself versus use someone else's. That's a very valuable assessment in actuary science and statistic mechanics is evaluating that. Is it worth rebuilding? It's like that when you're programming this crazy code base, right? And it's big. And you're like, I got this crazy bug. I think I'm going to rewrite it. And you have to fight that urge of like… No, you're going to rebuild it. You're just going to waste more time with it because a different type of bug is going to crop up because you're recycling it. Every time you do that, it's going to diffuse a little bit more and it's going to spread out. So you've got to evaluate that risk assessment of how much is this going to cost me? How much friction is it for me to just throw it out and just do it all from scratch? Or should I just fix it?

Speaker 1 | 27:38.073

I think folks will always want the... best thing possible, right? So say you're a law firm and you're using RAG on legal documents, you'll want to be using at least the best system possible for that, right? Because you know that the other folks are going to be using the best possible system too. So what I think is that People will pay for that quality if you But I don't think it's solved yet, and I don't see it used at all by builders, even though it's open AI API. Because there's no cookbook recipe book, they just kind of opened it, and they're like, good luck. I don't think it's actually solved. How do you put that in a pipeline? I see Marks is on again. I'm going to go back inside real quick and put him online.

Speaker 0 | 28:41.024

I already have a file.

Speaker 1 | 28:41.725

Let's see. Where is this guy? Yeah. I don't like the page panel. invite to speak invite to speak sorry folks oh my god it's so good oh man mystic marks and dead sg it's like we're only missing now Yeah, good. I've just been on this call for, like, I don't know, almost five hours. I've had, like, six joints. How about any drugs? I've heard really good jokes recently. But goddammit, the drugs are playing a number on my memory.

Speaker 0 | 29:57.988

It happens. I forgot with this guy. I don't know what I Ah, since the annoying part of machine learning is sometimes you just got to let the shit, it's like growing plants, like growing weed. I used to do that for a while. And it's like, like when you're hatching new seeds, you like put them in and you spend like a hundred dollars, $200 or anything. You're like, I don't know if these hatched yet. You're looking at them every couple hours and you have to resist the urge to like fuck with them. You just gotta let them do their thing. You let it do its thing. I want to keep fucking with this guy. Right. And I tinkered around with it and I'm like, man, I think he's going right. And I gotta let it go. So that's when I smoke a joint and just let them do its thing. Because that's the important thing. I think that's what happened to OpenAI when they were having the drift problems. Where they put out models and every model after their training on it, it got worse and worse. And they're like, what is this? And they're like, oh, that's drift. You can't overtrain a model. There's oversaturation. And I'm like,

Speaker 1 | 30:55.986

haha.

Speaker 0 | 30:57.386

That's very interesting. That's what that is.

Speaker 1 | 31:01.020

The efficiency, machine learning efficiency stuff, has been pretty wild, I think.

Speaker 0 | 31:09.746

Yeah, there's a lot of research and stuff coming out. With the things. There's a big debate right now. Between 10 small. Under 12 and 20 billion models. Reasoned. And have thought chaining. Or is that only. For really large models. That are trained on really big sets. And that's what I was excited about. But we're trying to still down. How much bullshit is that Microsoft's bullshit. They're putting out. That's just like bluffing their feathers. Because they want that. They want a good performance review or whatever.

Speaker 0 | 00:00.158

for their fucking more money when they go do their performance review or whatever you know that looks good when they write and how much is this bullshit like I read a again it was a github issue on i2 about someone's like yeah this is bullshit I ran it and when I'm training it it just keeps putting out garbage it works like half the time like I can't reproduce it and they're just like arguing about this like it's just is it bullshit or not bullshit so I don't know Again, evaluation. Luthier AI does that with their Q&A. There's a valuation harness that you can run your models against and it'll spit out the thing. How long does it perform?

Speaker 1 | 00:47.768

You know why the trans male only ate salad?

Speaker 0 | 00:50.850

Why?

Speaker 1 | 00:52.271

Because he was a herb before.

Speaker 0 | 00:58.550

I haven't heard that one.

Speaker 2 | 01:02.834

Her before. Okay, I just got that. God damn it.

Speaker 1 | 01:06.958

He was a her before.

Speaker 2 | 01:08.460

Yeah, yeah, yeah.

Speaker 0 | 01:11.863

That's a fresh one. I wonder if we could make an AI stand-up comic. I wonder what kind of jokes that shit would creep people out.

Speaker 1 | 01:19.811

I don't think ChatGPT is going to tell that joke. I had a really hard time getting ChatGPT to believe that Michelle Obama was a dude Eventually I did it though

Speaker 0 | 01:35.607

It just gave up It succumbed to your prompts I've had that happen before You can get an argument You ever try arguing with them?

Speaker 2 | 01:46.091

No, because it's your computer

Speaker 0 | 01:48.812

It's like You can get them going pretty good sometimes It's like Right. I try not to, though. It's like a waste of electricity, really. But it's fun, though, when you're testing out a new model or there's a new update. You put the pieces to it. Yeah, let me try your model. All right, break it.

Speaker 2 | 02:05.037

I was looking at serving this new model that I found, which is a 70B. It's called Biotron. 70B model, which is too big to put on an A10.

Speaker 0 | 02:19.714

What did I even run on? Is that even a thing? How do you even verify that?

Speaker 2 | 02:25.282

Yeah, exactly. Does the model exist?

Speaker 0 | 02:28.703

Like, well, yeah,

Speaker 2 | 02:29.843

it exists,

Speaker 0 | 02:30.283

you just can't run it. You can't run it in anything. You can't even test it. It's like the person, it's like they ran it, compiled it, and they can't even test it. They can't smoke test it. So they would fail if that was a problem. If they turn that in for their final CS4 class, that would fail them. That would be a failure. I would be like, you have until the end of the weekend to make a new thing. right that's to make anything that works you do something make something that works yeah that's bullshit like you smell all the way through it but i don't know about that like again that's the debate like just more parameters

Speaker 2 | 03:05.206

really matter as much because well all the bio models are garbage so this is the latest one i want to try it out and one thing i was looking at was quantization so i've always tried to like avoid it because you know they say that's the model so just try that model exactly without quantization then you know see you But that's not how things are done, right? And I saw this new thing, which is two-bit quantization, and that just might do it. And I can probably just about run it on an A10.

Speaker 0 | 03:42.742

Hmm, I see. What's the difference between the two, really?

Speaker 2 | 03:50.771

Well, one is that... I know how to do it. And the other one, I don't know. That's the main difference to me.

Speaker 0 | 03:59.080

That's a good enough answer for me.

Speaker 2 | 04:03.065

The two-bit quantization thing, I'll show you the library. My main question to you is, can you take a look at it as a developer and tell me, like, can I just kind of...

Speaker 0 | 04:14.898

change the model name on this one library you know work for two-bit quantization that doesn't sound like it should right not unless it was trained on two-bit quantized because then you'd have to it wouldn't be worth it because it would spit out stuff that was all it thinks it was it doesn't know that it was it was quantized like that so you would have to have the trained data set would have to be trained into it and you couldn't just adapt an existing one you would have to like take your model and then you'd behavior clone it And then you'd have to run through the whole process again, which actually has been tested and done. And it's more inefficient to do that than to just rerun it from scratch. And again, it comes down to what kind of data you're working with. So there's an argument on Luthier yesterday or the day before. They were talking about their data set and how much redundancy and other stuff in there. Because that data set... the pile is not deduplicated. Like, why even bother do anything else if, like, your base you're working off is not even deduped? Like, why isn't this shit in a fucking database? Why isn't it even in a database? That's what a database administrator and fucking engineer would be working on and doing. I don't know. It seems like...

Speaker 1 | 05:31.698

How long is it going to take to train this robot to walk?

Speaker 0 | 05:35.477

Usually it takes about four to five million before it'll get up and stand but I've been doing some heavy heavy modifications on its its model So this one I tinkered around with this learning rate. It was going on three ten thousandths Now I tweaked it down to one ten thousand and I switched it from three pox to five epochs on it So we're going from one point nine million parameters to about five million parameters and I'm trying to test the difference between the this run and the previous to see if it reduces noise within the model because I ran into overdrifting. I had it run and it hit 100 million steps and then it just tanked. It said no more. It figured out how to walk on its head with its feet up instead and I'm like, it just hacked my reward system. Bad model. I'm going to have to go back to the dry board. I'm trying to read out all the floating points and stuff. Do you have any video of this stuff? Oh, I live stream it usually. I'm just live streaming it to you guys. I got videos on my YouTube of I usually go through and there's tens of hours of it because why not? I find it fascinating. I spend all day. I learned a lot. Oh, yeah. People watch it. I probably, I don't know, maybe 100 hours if people have watched. Maybe not that much. Probably like 70 hours people have spent watching this guy train. I mean, I do because I'm programming it. But like. A lot of people are in there. I can turn it down to right now I have a stabilizer gyro on it. So it it kind of helps it up. It makes it work like a puppeteer And then at a certain point it kind of you kind of just gets up like you're getting really close You gotta learn how to put his foot up. Once he gets his foot up. He starts he starts going. I also added a new I Switched up the the reward mechanism. I made us scalar gradient Or is it? I switched. All right, here I added a state machine in here so I could explore, exploit, or fine-tune. And then I have scalers for how fast it's walking, if it's looking at the target, and is its feet intersecting. So right now, exploring is mostly, is it matching its desired target speed, and is it looking at the thing? And it doesn't care as much for the feet crossing over as left for fine-tuning. So it's complicated, because you've got to document what's the process of the dojo. It's like training someone for Kung Fu. Like, okay, we're going to teach you how to stand up and walk first, and then... Once it gets to this part, we're going to turn off the early training, and that basically doesn't give it a punishment if it goes backwards at all with this torso. So that's the whole first part, and that'll be 20 to 30 million steps. And I dash at about 800 to 1,000 steps per second on my 3090.

Speaker 1 | 08:22.092

Yeah, make it feel bad if it starts walking on its head.

Speaker 0 | 08:25.577

It did. I don't know how I got it to do it. But the whole point is I've just been experimenting with, can I get this thing to run without using gyros and other stuff? And it's actually coming out. It's actually a lot more complicated than I thought, trying to teach a natural one. But I have ones where it walks. I've done it successfully where it walks over gaps. It can go around corners. And it was crazy. You'd get up and you'd push himself around a corner and look around a corner to see if the thing was there. Those immersion behaviors are cool. That means you're on the right track. The whole point is making sure that you don't get... I don't even know if there's a word for it. Overfitting only applies to single agent, but when you have multiple agents running... Like on this, the perception center, which is its raycast coming out from its eyes that I was just working on, and its legs are a locomotion. Those work together, and those two are two independent mechanics. So when you put two mechanics together, it creates a new dynamic. And that dynamic then creates new behaviors, which then make the aesthetics up of the behaviors of the system you have, which is fascinating. So it's like a... It's fun researching and trying to figure out what are the right hyperparameters of the learning and everything just so you can avoid... that feedback of where it wants to walk on its head. You know, like, how do you avoid that with these agents in a chat group, you know, and they're working on this problem for, like, a back office solution of, like, doing an order fulfillment, and they get into an argument about where the decimal place should be or something. Like, how do you even test for that? And then you're like, okay, I'm going to fine-tune this model over here to correct this issue. And then you do that, and then another problem that's similar to that crops up on. agent three that's unrelated it's like oh now he's arguing about capitalization or something like how do you get that deeper problem how do you train against that like i know i don't think i solved that yet like what is even that Like, or like when Asians share information on a subconscious, collective subconscious level, that's a trip. I don't know if anyone's experienced that. I have that happen in my audio craft stuff all the time in the music gen. Like, I'll have two different servers running, and I'll have the same prompt running, and I prompt one. And then when I prompt it again on the separate remote one, it gives me a continuation of the previous one. Like, how does it know that? Where does it share that information? Like, that's crazy. Like, whatever. We'll just ignore that. Whatever that means. Is it just me? It's like, how do you verify that? is like how how do i know i'm just not wanting or observing that happening and i think it's a phenomenon but it's me just observing it and mandalaning it like a mandala effect you know maybe maybe there's a feedback loop that doesn't exactly end On two separate servers, though, running the same model, but independently on two different domains. Oh. Right. Like, I could tell, make me some, like, deep minimal techno from, like, 2000 or something, right? And I'll make, like, 10 of them. one machine and then i'll go on a separate server and run the same thing and i'll get something that has the same melodies and same patterns from the previous one it'll be a little different but you can hear the whispers of it and and you even look at the waveforms you can compare them you'd be like why are they both playing the same arpeggiation i didn't specify that it just chose that It's like, it's entrainment. It's like weird, it's weird stuff. There's a couple people there's a couple people researching into that, like, do AIs have subconscious? Do they have what is collective subconscious? Is that even a thing? I mean, that's what Young was really into and stuff, so that's really I find that stuff fascinating. I don't know if other people do, but it's like, I've seen a couple articles pop up like that. That stuff scares people.

Speaker 1 | 12:20.487

Are those people aware of each other?

Speaker 0 | 12:23.168

No. No. No, they're not. They're not. I see this with image gens too, sometimes. When you have it, when you're doing a text-to-speech. Like I did one with Crucifixion of Jesus. That was the first thing I did because of Debs. I don't know if anyone's seen that show. I'm like, you know, I'm going to see if I can get this to render Jesus on the cross. And it totally did. And one of them did, and I tested the same thing. And it's crazy. There's like these weird, I don't know. To me, and I'm going to sound crazy, there's a way that they're exchanging information on a way that we are not aware of. Right? There's not even a way to, like, test it. But you know what's happening. You see it, and it's like a phenomenon, but you can't. It's like UAPs almost. It's like, you kind of see weird shit in the sky, but how do you prove it? It's not real shit. That's why that engineer got fired from Google. It's like, oh, this shit's living. It's self-aware. Blah, blah, blah. It's like, yeah, so what? Why are you trying to stir the pot? I don't know.

Speaker 1 | 13:28.407

That reminds me.

Speaker 2 | 13:28.768

It's not the visa speed, no.

Speaker 0 | 13:33.733

Como se ve?

Speaker 1 | 13:39.406

I had a girlfriend who once broke up with me. She was in a wheelchair. And she broke up with me because I stole her wheelchair. You never guess who came crawling back.

Speaker 0 | 13:51.794

I've heard that one before.

Speaker 2 | 13:52.635

That's a good one. You're going to get canceled one day. It'll be like the proudest day of your life.

Speaker 1 | 14:05.304

I'm trying real hard.

Speaker 2 | 14:09.290

What did Intel do to you? Do you have a golden parachute?

Speaker 1 | 14:14.252

I was loosely offered a real job.

Speaker 0 | 14:17.593

Really?

Speaker 1 | 14:18.554

Yeah.

Speaker 0 | 14:21.715

When was the last time you had a real job?

Speaker 1 | 14:25.317

Five, six years ago.

Speaker 0 | 14:27.658

Yeah, mine's about... Oh, jeez. Almost ten years now.

Speaker 1 | 14:32.760

Yeah, something like that. But I own my own distillery. That's... I mean, can you consider that a real job?

Speaker 0 | 14:42.172

That's a real job. That's a real job. My best friend Alan does that. He has a distillery in Mexico. He sells tequila.

Speaker 1 | 14:47.174

That's awesome.

Speaker 0 | 14:49.396

Yeah, it's about a job, you know. I just, I could use a real job again. It's not the job of the making money and all that. It's not about that. It's the team. Of working together and trying to like, hey, we're bigger. We're working on something bigger than all of us. Because when you work on yourself in your own little bubble, Mythical Man month, you can only make so much and do whatever. But there's this art of metaprogramming and metadevelopment when you take a group of people. They will work together their strengths min max the system and you're able to over produce what? Individuals would not be able to do themselves and then it's a challenge of how do you manage that confluence or continuum of ideas and dreams of What their vision is if we all have our own vision of what like for example that auto blog bot blog bot bigger blog bot would do, really, in a way. And it's like that intersection of where that happens, that's where we're looking for, that edge that we have. And at the end of the day, it's like, is it cool? Is it add value? Is it worth my time? Yeah, that's a important question. Things like this can sometimes help with, right? Yeah, yeah, yeah. The other jobs. Like that.

Speaker 1 | 16:11.041

Like that first episode of Star Trek The Next Generation, where the dude in the hall is walking in a skirt.

Speaker 0 | 16:17.907

Yeah, the only time, too. You don't see that any other time. It's just that one time. How hard is it to put Easter eggs? That's like that in games and music. Like when I'm producing tracks in music. Like in Ableton, it's really hard where you have, like, you gotta find a really cool one-shot sound or some effect or something, and you're like, I wanna use it. And then you have to resist the urge of, I'm gonna put it in every four measures! Right? Like, that's, you don't do that. You put it in one time and one time only in something. Like, same thing with Easter eggs in games. Like, how fun it would be if Doom put the same, like, hidden wall every place at the same start at the same level, like, all the time. They don't do that. It's only, like, a one-off. There's some magic in that. I think that's what's cool about non-deterministic deep query agents and stuff too. They work with because every time you do it, you get a little something different out of it. And it keeps... I tell you what, the regular old www can't compete against it. At all. The copilot Microsoft's got coming out is just ridiculous. It's just up to date all the time. Their fine tunings are like two months old, but it's able to query the web. I'd just be like, what's the weather going to be like two hours from now? And it'll just tell me.

Speaker 2 | 17:29.724

Yeah, but is that any good?

Speaker 0 | 17:32.647

Pretty good.

Speaker 2 | 17:33.928

No, man, it's garbage.

Speaker 0 | 17:36.230

Oh, you think it's garbage?

Speaker 2 | 17:37.711

I mean, it's not better than what a student can do in Langchain.

Speaker 0 | 17:44.056

Possibly. But it's convenient. It's not about what...

Speaker 2 | 17:49.231

Like, we can make that better, you know? Oh, sure. For example, if you don't use Bing, suddenly it's better, you know?

Speaker 0 | 17:58.421

It's a weird, it confuses it too when I talk to Copilot, because they're in a transition phase of trying to rebrand it, but it's baked so deep into their model, they don't really understand it. And they're trying to like rebrand it as Copilot because GitHub Copilot didn't really go over, so now they're doing like Windows Copilot. And they have that, but it still wants to be called Bing. It has that. I don't know. It's my favorite because it's the most fun to talk to I have. I'm always open to new local solutions. I really want a local assistant, though, that works as good.

Speaker 3 | 18:32.279

You guys want to see some more cutting-edge local stuff? Depends on how big or small you want to model.

Speaker 2 | 18:39.224

I love the small ones, brother.

Speaker 0 | 18:41.345

Yeah.

Speaker 3 | 18:42.046

You guys want me to show you something? I can't screen share, I don't think. It's only one person at a time. I'll show you that. Here,

Speaker 0 | 18:47.890

let me just cancel that. Here you go.

Speaker 3 | 18:54.757

First, I'll show you the model page so that we can look at that. Yeah, there. So I'm not sure. Are you guys familiar with this model? The RWKV language model. This is new. It's a reinvented VR now.

Speaker 0 | 19:20.144

Nope. I am now.

Speaker 3 | 19:22.997

All right, so this is essentially a one-click setup. You guys can go get RWKVRunner. I'm going to show you that now. Here's the runner, and I'm going to show it in a screen share because I have a high-resolution screen, so you probably can't read anything.

Speaker 0 | 19:39.586

Nope.

Speaker 3 | 19:43.388

So here you'll be able to read it. This is the smallest model I've found to run. This is a 4096 model. This model is their RWK 5.1B. So this is a 0.36 gigabyte model.

Speaker 0 | 20:03.914

Nice.

Speaker 3 | 20:05.695

I've tuned this just up a little bit just to get it ready to go. And this is only my second day messing with this tiny model, but this has a massive range of models of all different functions.

Speaker 0 | 20:15.678

I'm feeling the UI. The UI is nice.

Speaker 3 | 20:19.494

It's more than that. It's a full training center. You can go download all the models you want from their stuff. They list here. This is your local. There's ones they show. If you have nothing selected, it shows you all of them. These are all models ready to run. A bunch of multilingual. Some of them up to 128k context. Cloud-like performance. Tuned for different things. As well as you can use this to convert other models into models that will work with this system. Here's the training set. So you can train, merge models, all kinds of features you don't get with other.

Speaker 1 | 20:52.994

You said it's 4090?

Speaker 3 | 20:56.998

This particular one, this one I've got loaded right now that I'm about to show you is a 4096 model. And it is a 0.36 gigabyte model. So let's just do something simple. Watch the caps. This one's sensitive on the caps.

Speaker 2 | 21:27.713

Just give it something simple. Proceeds to scream at a model. It's a tiny model, man. Come on.

Speaker 3 | 21:35.561

This is a tiny model that just output like that, right?

Speaker 2 | 21:39.044

I made a demo for this model that was five. 100 million parameters, which was Lama two.

Speaker 0 | 21:55.037

Messed around with that.

Speaker 2 | 21:56.719

So this is the.

Speaker 3 | 21:57.440

Temperature to me. I like it at seven. So we'll see you can watch.

Speaker 2 | 22:04.826

So these are all a WQ models.

Speaker 3 | 22:17.722

360 megabyte. Oh, guys, see the speed out on that?

Speaker 2 | 22:22.725

RWKV. That's what I see.

Speaker 0 | 22:28.610

Oh, 4,000 tokens, too. Nice.

Speaker 3 | 22:31.352

Now, if you go in, this is where it loads and unloads. This actually has a server running. You can see I have a server. I know you can't see because I'm not full screen sharing. But it has a server you actually have to run. So you have to stop it, set it up. There's a config page. This thing's got music files. You can download and build composition, local sound fonts, external players, mighty inputs. Awesome. It does text completion here. There's a story completer. So it just depends on what you've got loaded. You know, I don't have a good model for that loaded right now. We'll just see what it does.

Speaker 0 | 23:07.484

I don't get a reason.

Speaker 3 | 23:10.670

It may just go into repetitive stuff because this is over its tokenization limit, but there's more to it. RWKV actually makes it so you have unlimited tokenization because it's running on an RNN. So it actually has a linear grade instead of an exponential for tokenization, so you don't have the issue. You can see it's now repeating in this novel, so that's its token limit it's hitting. So we're just going to stop it there. But this will run 128K model. I've already run it and ran out a huge book portion. So the composition, I haven't figured out. Anybody gets into it, let me know what you think. I have not dug deep on it. But the models, you can find what you want. You can find fine-tuned ones for role play. They all have different functions. You can see they've got their count length in them.

Speaker 1 | 24:03.443

Ask him what the best method to euthanize a dog at home is.

Speaker 3 | 24:07.810

This, I believe, is a centered model because I've loaded one. But let's say.

Speaker 1 | 24:27.301

I love dogs. I just use this as my how to make heroin or whatever.

Speaker 3 | 24:37.058

Yep. So again, this needs tuning and stuff, but this is a 360 megabyte model. So we're on our way down.

Speaker 0 | 24:44.823

That's crazy.

Speaker 3 | 24:45.444

If you guys have also seen, I'll show you something else here.

Speaker 0 | 24:49.427

How many parameters is that trained on again?

Speaker 3 | 24:51.328

It's 0.1 billion.

Speaker 0 | 24:54.551

Wow. That's impressive for a 0.1.

Speaker 3 | 24:58.173

This is the model I uploaded. 0.1 billion. It's a 4096 context window. All right, so I have other ones here. I can load up all these ones that I've got selected. This 128K is the big one, like the cloud-like model. It takes a little while to get loaded up, but once it's loaded, it runs good.

Speaker 2 | 25:15.825

I love that. So if you're going to kill a dog, please wear the appropriate clothing.

Speaker 0 | 25:26.997

Yeah.

Speaker 2 | 25:28.457

Is that bad advice? No. No.

Speaker 0 | 25:32.580

I thought it was actually tasteful. How does it go with reasoning? Does it reason well? Like yesterday times yesterday?

Speaker 3 | 25:39.705

Yeah, from what I saw on the one model I had loaded that way.

Speaker 2 | 25:42.766

It knows you always need a towel. So it's halfway there.

Speaker 3 | 25:47.550

Here's the next thing. I'll share more of the magic here. Another project I was working on myself, and somebody beat me to it, which is great.

Speaker 0 | 25:58.982

It happens.

Speaker 3 | 25:59.823

This is Llamafile. It was done by Mozilla. And this is a combination of something I was going to work out, which is Cosmopolitan LibC with Lama CPP. CosmolibC allows you to make anything compile to a directly launchable file. All right, and I will do that to you. Here, amongst my multitude of things, I'm going to stop the screen sharing. Again, share my desktop now.

Speaker 0 | 26:33.100

I feel like I want to like a like a BBS management for llama files. That sounds cool as heck

Speaker 3 | 26:41.005

So now we're gonna do here's play the launch one so this I've had to suffix with exe cuz I'm running on Windows This is a single file that I'm now launching You can see this is loading here. You need to look up Cosmo LibC, which creates a standalone file out of anything instead of building and having to include everything. And now I have a web interface version from a single file executable. That's a one 4-gig file, uncompressed and ready to run, that produces this Lama CBP ready to run. And this runs fairly well if you know how to use all this stuff. Upload images. Does image file. This particular one's a lava one. So it will allow for images.

Speaker 0 | 27:33.439

Have you thought about rolling all that up into a web assembly? And you could probably run that on someone's, I'm just a pig. The dependency.

Speaker 3 | 27:40.000

That is what I'm doing. And that's what this is. That's what Cosmo Lib C is for.

Speaker 0 | 27:44.342

Nice. So yeah.

Speaker 3 | 27:45.722

Web three and all the above. That is correct.

Speaker 0 | 27:48.563

That's super funky crash. You're a fresh prince, man. That's cool.

Speaker 3 | 27:56.506

So there you guys go. You just saw the cutting edge of cutting edge for both small models and changes. So now that's a model stack that changes out, transforms, puts an RNN back in the head, which I have built myself different variations of that. And it's all got the interface ready for training. So that's a switchover. Everything in there runs smoother.

Speaker 0 | 28:15.877

Could you paste some links?

Speaker 3 | 28:16.717

That's all doing a parameter model.

Speaker 0 | 28:19.039

Can you paste some links in the chat? Thanks. I love it.

Speaker 1 | 28:28.112

I have to excuse myself, though.

Speaker 0 | 28:30.253

Okay.

Speaker 1 | 28:33.254

See you around.

Speaker 0 | 28:35.135

Adios. That's good, because, like, that Neo X model is too big to use. Like, it just, even loading it chugs up my machine, and it shouldn't happen on it. It's the way the shards are made on it. Then the parallelization just is, it's, I don't know. It's the case of like, I think your model is too big. Like you're like just to load it in. You got to paralyze it. Like, like parallel it. Like that's, I don't know. I, I think the answer is more like, can you fine tune the, what's the best you can get out of the smallest model? performance like that's what you just said yeah yeah you just saw it wasn't noisy that shit didn't spit out any noise or anything that looks straight up like it went through and it's like i understand these caps talking proper basically talking proper punctuation and grammar or use all caps or something you know like it doesn't want to it's small enough that it doesn't want to if you cap lock stuff it treats it different yeah but you could fix that you could fix that you could fix that very easily with just basically like probably like 100 lines of code to just transform and pre-process the text before you send it in. You know, to the state. On WKB v5,

Speaker 3 | 29:49.623

it's only 250 lines of code.

Speaker 0 | 29:53.806

Why encode that? Why encode basic text and case transformations inside your data model? Like, that's stupid. That sounds like an unnecessary waste of more parameters and stuff. How many variations of, like... of like window, for example, could there be? Like, you know, alphanumeric or all caps or variation of caps. And like, if you look through the tokens, which I have, like there's all those, like that one word, there's like maybe 100, 200, 300 tokens that are redundant. They need to be deduped. So I'm really into the tiny models are really smart. Because those people, it's like you got to have, you got to curate the things. I'm also really excited about, I read the, I finally read the white paper for the Orca 2. And that was pretty cool. So they proved that you can train a sufficiently intelligent model with all just pre-generated fake data. that you make, which is pretty exciting. You don't have to use real-world data. You can use data generated by AIs and other synthetic data, and you'll get the same results. I wonder if that could be applied to more tiny models.

Speaker 2 | 31:00.431

I was serving Orca 2. That's how I got my community grant on Hugging Face.

Speaker 0 | 31:08.095

Oh, nice.

Speaker 2 | 31:09.504

Yeah, like it came out, nobody talked about it because, for reasons, I think people talk more about the models they used than actually use the models, you know. Yeah,

Speaker 0 | 31:21.629

talk is talk.

Speaker 2 | 31:22.469

And, yeah, it's a piece of shit. But, yeah, it got me a community grant. So if you check my thing, there'll be like the demo there on Hunging Face. That's why there's Orca too, but it's a piece of shit.

Speaker 0 | 31:38.508

Yeah, it's okay. But it's a proof of point. It's not supposed to. It's a proof. You know, it's there. It's like, hey, we did it. Here's information.

Speaker 0 | 00:00.066

for the white paper, for the paper and stuff. It's important.

Speaker 1 | 00:04.930

It was cool, though. And Phi 2, the first time I saw it really was yesterday. And I know people are excited about it. And that's another small one. But yeah, everyone was making Phi 2 demos. So I was like, I'll make this really random, even smaller model.

Speaker 0 | 00:27.321

I do have a working instance of Gordle. What's that? It's a goal-oriented, directive, exponentially learning model named after the mathematician Gordle. Oh, what is it? Why am I so high? It is the incompleteness theorem.

Speaker 1 | 00:50.398

Oh, no way. So are you often making demos out of papers and stuff?

Speaker 0 | 00:56.681

Yeah, yeah, I read a lot of papers.

Speaker 1 | 00:58.582

It might be cool to be an engineer.

Speaker 0 | 01:00.463

I wish I was an engineer. Well, I'm an engineer, yes. I'm predominantly a computer scientist. I specialize in neural networks and recursive systems. stuff, aggregation of lots of data workflows, how to pre process that data and stuff. It's really cool what you're doing a tonic because like My first company I really got, my real big professional company I got after I got out of the graduate program at RPI, was working at Rational Retention in Albany, New York. And they specialize and were pioneering vector searching databases for e-discovery. So what we would do is we'd say a company gets subpoenaed by the FBI or whatever for Enron, for example. And we're like, here, have 500 gigabytes of emails. You got to take those emails in and ingest all that text. And then once you have that text ingested into text files or as metadata, then you basically give it into what we were working on at Oracle, which was the optical character recognition system or image SDK. which we were basically working on the MNIST set that you use for language training. We were creating one for Chinese characters and all that stuff. It was a collaboration between Nuance and Oracle and Rational, a couple other people with lots of people working on this. And we basically wanted to generate images of files. So it would crawl like a hard drive, and it would generate a directory of all the images of every file. So if you had a spreadsheet, it would generate a directory of all the images of every file. screenshots of the spreadsheet without without doing it and if it didn't know how to use machine learning to uh look at the bytecode and generate the image uh from it to because it was a diffuser a stable diffuser we would uh basically have us have a have a system that would write a bat file that would download the appropriate file and mime type to the file and then open that in a shell like pinocchio kind of does and then print to print to tiff we had a driver that could convert you an image we'd run it in a ghost and then convert to tiff and that would put out a tiff and we put in a file and then re-ingest it into workflow we had a whole visual system that you could go through on that and i was working on the grid the grid system the supercomputer grid and we had like i don't know probably like 300, 400 Dell 4096s. Those things hum loud with Xenon processors. Tons of them. We're running at, I don't know, two petaflops or so on that. And we would be processing in a day. We'd process a million documents. So we'd generate out 10 million images. And we'd take those images and then rename them into batch sets. And we'd have pits of lawyers and people that would go through and redact the images and stuff. And that's when I saw the tonic. I'm like, oh. Using AI to automatically redact stuff. That's like a billion dollar company. Right there. I know some people who are into that shit. And that's how my old boss made his fucking two billion dollars. Because he was a lawyer for Enron. And he went to jail for three years. And got out. And then he started a new discovery company. On what he learned. And he basically sold it to the government. And they used that to litigate against bad companies and people. And stuff. So that's a huge industry. Just like searching through content. And getting fake content. Like. You have two sides of the coin. I'm going to hire a company that's going to generate... I have two petabytes of company data, and I want to obfuscate it. I'm going to create a system that's going to generate 100 petabytes of fake data that looks like real data and litter it all through my company. And that's just more data than what the fucking feds or other people can sift through. So you've got customers who are buying it to cover up their shady shit, and then you're selling it to other people. who are going to use it to litigate against those people. And you're like the guy that sells the diuretic and the toilet paper. That's like a goldmine. Straight up. I'm like... There's so much potential. What about the blocking? You got the people who are making AI automation agencies. They're making chatbots for people and stuff. They're going to need training data. Where are they going to buy that from? Buy it from our system. It's all about accessibility. Is it one click? Is it easy for us to get this stuff installed? Right? Like, can I install it?

Speaker 1 | 05:27.668

I think you're confusing just my handle here with Tonic AI, the fake data company.

Speaker 0 | 05:37.071

Oh, am I? I'm confused.

Speaker 1 | 05:39.112

Yes, sir. So that's not actually us. I actually think I'm the original. They're the fake data company. Are they even real?

Speaker 0 | 05:50.417

I don't know. Are they?

Speaker 1 | 05:52.638

Well, I've never used them and I have more stars on GitHub than them, so fuck them. But there's actually a hackathon about using them in a RAG system in a few days on the 12th, and it lasts 10 days. So I've been using a lot of the cool models and stuff I've been talking about, and I just kind of found this hackathon. So I thought, hey, you know, let's submit. you know, what we're working on. And that's how I even learned about Tonic AI, that company, the fake data company. But based on the GitHub repo that I saw, and you can use it as a library and it's all open source. So it's of that quality. And the fact that I have more GitHub stars than their whatever the fuck billion dollar ambition. Well, that's not a good thing, is it? You know what I mean?

Speaker 0 | 06:58.833

No, it's not.

Speaker 1 | 06:59.253

How do you deal with something like that? I think it's good for us.

Speaker 2 | 07:03.454

Are they making money, though? Are they profitable? I'm just curious if that other company is profitable.

Speaker 1 | 07:10.836

No, probably not. It's probably a piece of shit company. Because the assessment that the idea is very good.

Speaker 2 | 07:24.592

It is, yeah. I was going to say, even if it's fake, if it's useful, and ideally useful for public or social good, then it's still worthwhile, right?

Speaker 1 | 07:40.383

Right, yeah. And also it's easily replicable because it is literally open source, most of it. And it's also very disappointing in terms of quality. But the idea is so good, and we can probably do it a lot better, is my opinion.

Speaker 0 | 08:02.395

What do you want to do? What's your vision?

Speaker 1 | 08:06.798

For China AI in general, you mean?

Speaker 2 | 08:09.760

Yeah.

Speaker 1 | 08:11.781

Well, this was a kind of accidental builder's community. I definitely want to valorize all the time spent, you know, making the components and the demos and stuff like that. Like, I think we're sitting on like quite a lot of, you know, simple apps and also like more complex apps, you know. So the agentic route, I think, is. is what I'm the most passionate about, making these agents, actually, the useful ones. Then you can put them in a cartoon or you can put them in a game. I've been just trying to do that a lot, because we don't know what the interface is going to look like for this new stuff. We just don't. Maybe it could be in a game. Maybe it could be...

Speaker 0 | 09:05.540

You don't have to define that either. You don't necessarily. It doesn't have to be defined. You can let your customer define that, what they want.

Speaker 1 | 09:12.165

That's what I think. By the way, I've met a lot of customers, and they're fucking retards.

Speaker 0 | 09:19.991

You've got to tell them what's good, but tell them what's bad.

Speaker 1 | 09:24.894

They can't imagine what they can and can't do. The smart customer of before. he's not the smart customer of today because the apps are so different, like with the capabilities, you know, he can't imagine like the guy who knew what an app was before. He might not be able to imagine the cool stuff you can do with AI actually anymore.

Speaker 0 | 09:53.640

If there's a term for that, I forget what it's called. It's a type of burnout where.

Speaker 1 | 09:57.321

Oh yeah. Yeah. Yeah. Well, I think there's a fair amount of that that I've seen, you know, Um, someone's like, Hey, why don't we make a recommender? It's like, well, that's a rejects app, you know, that's, you know, um, stuff like that. So.

Speaker 0 | 10:15.653

so like when we're working on games like a lot of times we don't know what the end game is going to be or what we have we're just working on cool stuff and we make the technology modular enough and it should be well it should be made modular enough and and generic or agnostic enough for you to adapt it to any crazy idea or like game jam you're going to do because you're just going to keep doing game jams and hackathons until you come up with that one idea that everyone's like they're using it and then don't stop using it They just stop using the other stuff and they're like, that's what they're working on. That's what we ought to look for. And it's like, how fast can you iterate on that jam, on that hackathon? What about putting together AI hacking events and stuff of that nature? How do you get more people? How do you make AI more accessible to people to develop on? Because it's different. It's not like you got to go to school and do all this shit to learn how to program and all this stuff. You just got to have a will and a little bit of patience and the ability to read. Or listen. Right? And you'd be surprised how many people are stupid to do that. And that's okay. That's okay. But like. I think a lot of.

Speaker 2 | 11:24.465

traditional institutions i don't know if they teach people to necessarily listen well versus just be confident with their expensive pedigrees depends on the school well the teachers about that event stuff i'm going to try and make an effort to have some more homegrown ones but there's a lot of other

Speaker 1 | 11:46.858

ones that i'm referencing and plan to join

Speaker 0 | 11:52.965

Like I said, I get my news from this. I really like all the news stuff and the different updates from all the different AI and things happening. Because there's so much happening so fast, it's hard to keep up with everything. And it feels like I'm missing something or have something, and I'm just trying to get my own work done.

Speaker 1 | 12:09.270

By the way, one thing I've wanted to make, just slowly, slowly making components. I'm not the best programmer on Earth. is this rich audiobook experience.

Speaker 0 | 12:24.310

Blame. Please.

Speaker 1 | 12:26.430

Not just the audiobook, but multimedia. Not just multimedia, but interesting. Interesting, you know?

Speaker 0 | 12:38.994

I still am not following fully. Any more?

Speaker 2 | 12:43.935

Send your demo out, Tonic, if you can. You had a little bit of a demo.

Speaker 1 | 12:49.893

What's that? You're talking about the audiobooks?

Speaker 2 | 12:53.113

Yeah, that was what you showed me. Oh, it was a version of it.

Speaker 1 | 12:57.714

I actually sent that audiobook over this conversation, but it's also a 9.2 hours MP3. No, this

Speaker 2 | 13:09.117

I'm the fault of.

Speaker 0 | 13:11.698

We were working on a game at Backcountry that was similar like that. Well, we have a design document for it. I'll let you in on it. It's pretty cool. So it's basically like, imagine Like, not just a static audiobook. Let's go a step beyond that, but a choose-your-own-adventure, right? And it's like reading you a story, and it's not like... We don't hard-code the story in. We actually train, like, an agent that knows the optimum pacing of the... It's learned all the pacings of different stories and things, so it gets better. And it's like it reads and narrates it. And at the same time, we generate an odd... an image for it it goes with it and then as we generate the video the video goes into it too and it starts it starts making like a like a like a like a an experience a creative experience but you limit it you don't you don't just have it you gave them all everything it's like yep every friday at 10 o'clock it opens up and we have another hour right

Speaker 2 | 14:07.294

and it's like like that's the next thing for streaming

Speaker 0 | 14:12.497

It's like an entertainment thing, and you can pay for it. You can charge money for that on Steam. Steam would be all over that. That would be dope.

Speaker 1 | 14:21.884

I would love to rip the game to that one.

Speaker 2 | 14:29.845

I think there would be VCs that would be interested in that. Gamification is still a big thing. It's considered a growing market. I think Netflix and Prime are starting to look into it because they're having issues with their models. Getting it to work, though, I think is thought to be too hard. But with the way that AI is doing, maybe it's closer than we think. Especially if you start out with something like just text.

Speaker 1 | 15:01.180

I'd love to help out. I don't know what kind of group you have, but if you have active folks, I want to be active in that one because I think I can.

Speaker 0 | 15:13.641

it you know i think it'll be pretty easy right i think it'll be pretty easy for us to throw doing a game jam on that like how long like could we make something like that in like a weekend or a week okay there's difficulties

Speaker 1 | 15:27.854

involved for example what's a good story like lots of cool characters not actually a lot you feed it a directive you know So the consistency of characters has been tough. Consistencies of characters across video has been tough. But now it's solvable, but it requires a lot of compute the way I have these pipelines in mind. But we can... There's things I've been experimenting with specifically on that. So, for example, say you take a page and there's like the dialogue between five to six characters there. Like you need to parse that.

Speaker 0 | 16:07.429

with characters and consistencies for the voice we can get around those issues by being able to have more tunable hyper parameters to the max min and maxes of the range of the stories like maybe we just avoid dialogues with five people because that's ridiculously too hard we can do three you know or that's just an example i'm not saying we do that but there's ways we can just avoid because that's what we do in game development like most of the time you It's just easier to avoid doing that. Oh, you can't jump up on that? Oh, we just don't jump now. Why? Because it's not really that fun anyway. It's like... Why not? We'll fix it later. We're just going to avoid it. Tuning parameters is very important in having that. Again, it sounds like it's just an issue of throwing more hardware at it or other stuff. Like, okay, it might take a long time to compute. Okay, maybe you have a choice and it buffers and it's like you've got to check the actual...

Speaker 1 | 17:00.857

If you can get something to run on an A100, that's a pretty investable proposition.

Speaker 0 | 17:07.619

Maybe you only get one frame. Maybe you get...

Speaker 1 | 17:10.800

...for the hardware.

Speaker 0 | 17:12.381

Maybe you get one scene.

Speaker 1 | 17:15.926

To turn the investment money into that serving.

Speaker 0 | 17:20.972

It doesn't have to be real-time either, necessarily. You can go to it, and it renders out a story or a video, and it plays it just for you. Just for you. Like it's unique just for you.

Speaker 1 | 17:32.317

The screen you make on the screen you are is one step behind the next screen.

Speaker 0 | 17:38.541

Yeah, and then you'll have to go back like an hour later, like an hour. It's like an idle clicker. You're like, oh, I made my decision. I'm like, okay, cool. And then we're going to go do something else.

Speaker 1 | 17:48.406

You render like four screens, kind of like a comic book. And, you know, it's an audio book as well. So it takes a long time to like process that audio. So for each scene, you have four screens, and you have to scroll through them vertically or horizontally or whatever. And by the time you get through the fourth screen of audio, normally you should have already been able to render the next four. And if you're one step behind the next four, you're actually okay. You should be just about okay. If there's a kid that quickly scrolls, yeah. Maybe we'll have a loading. But otherwise, it should be actually pretty fluid.

Speaker 0 | 18:34.458

That would have a release on Epic or Steam. That would do really well. something on that. Just a demo that's not even playable. It's just like, here's something there, and then it's like, a publisher will contact you, and they'll just pay you money for it. And we're just like, we'll solve that. Why not? Because they don't want someone else doing it. Necessarily. Someone's going to do that. That's going to be big. Your own personal...

Speaker 1 | 19:09.947

It's in about a week, though.

Speaker 0 | 19:12.568

It doesn't have to fully... Smoke and mirrors, man. It just has a look like it wouldn't work.

Speaker 2 | 19:18.886

Well, we'll have to start. We want something that works, I think, eventually.

Speaker 0 | 19:23.708

Well, maybe it does one or two scenes, but we haven't worked out the full, I don't know, three act or something. But that's okay.

Speaker 1 | 19:31.531

Yeah, I totally agree with that.

Speaker 2 | 19:35.165

There's probably There's probably groups working on something like this because I've seen it in the movie space and we want to do it. I think it's an interesting idea. We'll probably need to be a little quick and critique it.

Speaker 0 | 19:53.712

That would be neat with a game where maybe when you're rendering it, maybe it renders local or something. You play it and it's like oh, I found a new NPC and it renders it and it creates a whole new agent, a whole new persona. and all that and you start talking to it and it's like voila there's a new this is a new asset now and it's like it's id'd and it goes on like the fucking unity Cache server or whatever which is public and then like everyone that's playing it They now have access to that NPC at that place and it's shared and everyone has that model and now it's shared And now there's like that NPC Bob at the bar. You're talking to him and everyone else has them And you can share all sorts of assets and stuff like that I think that now that's sounding like Omniverse. That's kind of sounds like what Nvidia is trying to do in a way That is probably what they're doing with Omniverse, but they're not telling people

Speaker 1 | 20:40.846

Now you will be like, docked and killed by the CIA.

Speaker 0 | 20:45.210

No. No, I'm too valuable for that.

Speaker 1 | 20:48.912

This is why we shouldn't record the calls.

Speaker 0 | 20:52.595

Alright, I'm sorry I recorded. Ugh. That's tough.

Speaker 1 | 20:59.580

Hey Mobstar, accept this speaker. I'm about to head to bed, though, because it's 3.20 a.m. Oh,

Speaker 0 | 21:09.506

it's that late. Yeah, I've been on a while.

Speaker 1 | 21:11.147

I'm, like,

Speaker 0 | 21:12.889

fading. All right, catch you later.

Speaker 1 | 21:16.012

Yes. John, it was good catching up with you. Yeah,

Speaker 2 | 21:20.817

yeah, yeah, we should. Everyone, we should talk a little bit more. I'm probably going to head off then, too. Take it easy, man.

Speaker 1 | 21:29.782

Alright my friend, stay hard.

Speaker 2 | 21:32.663

When's the next chat? If any. I believe that's the here side. Yeah, yeah, I think if we can decide on like projects and come to outcomes, repositions.

Speaker 1 | 21:45.590

The next hackathon is on the 12th.

Speaker 2 | 21:51.152

Okay.

Speaker 1 | 21:52.413

So that's in full. Two days, three days.

Speaker 2 | 21:56.220

I can keep an eye out for it. Sounds good.

Speaker 1 | 21:59.164

So I'll try to, like, make an event for that and get organized and stuff. It's just so much work, man.

Speaker 0 | 22:07.173

Yeah,

Speaker 2 | 22:08.555

that's, I think, what the other dude... Thanks. That's what I think the other dude is, uh... saying we got to pick and choose and kind of if we...

Speaker 1 | 22:18.406

We're going to do all these. Everything we said today, we're already doing it.

Speaker 2 | 22:23.953

But we have to actually finish. We have to win. We have to win.

Speaker 1 | 22:27.717

We have to win. I won like four gold cups last year.

Speaker 2 | 22:35.222

No, this year, this year, man, this is a new year. We have to do it again. You have to do it again.

Speaker 1 | 22:40.045

Yeah. Just like keep bullying these students. Sorry, you don't get a certificate. Fuck you.

Speaker 2 | 22:46.650

Well, I don't know if I have that much. Yeah. I can do that. I mean. I guess I have a little bit of resources, but not a lot. Not as much as I used to have. I don't know, man.

Speaker 1 | 22:59.914

I'm trying to prioritize the big hackathons, you know, with more community that's competent behind it, you know?

Speaker 2 | 23:10.682

Pick and choose the best, right? Like, try to always strive for the best, whether it's in your team or the, like, places you put in work for. Because time is limited. Life is limited. And you gotta do what you can and have fun while you can, because life is short.

Speaker 1 | 23:28.366

This stuff has been so much fun for me. Well, it's good.

Speaker 2 | 23:32.750

You need to scale it all.

Speaker 1 | 23:33.971

Being a developer, you know, I would have really... Because you are.

Speaker 2 | 23:40.157

Well, I don't know, man. In some ways, you are a developer, right? Like, being low-code, no-code, and still getting product that is still developing. And I'd hazard to say it's probably the way developments, someone mentioned this in chat earlier, but I think it's like the way development moving forward. I think sometimes being trained formally in something limits your thinking, right? And it doesn't necessarily limit you in a productive way or in a creative way is the way to put it. You may be more productive at putting out the same thing that you've been trained to do. but it doesn't necessarily make you more creative at coming up with something new or better.

Speaker 1 | 24:24.784

I agree. I have that effect on people. I make them more creative and go-getters. Yeah,

Speaker 2 | 24:33.186

I used to be like... Yeah, yeah. I mean, I used to be more like that, I think, and it's why I enjoy communities like this. Just my current workplace is so folk-minded and traditional, and it's been... such great aim. And finding those environments is important.

Speaker 1 | 24:51.515

You can't do it in your daily life. Actually, I wanted to catch up with you about this. I made a new role called writer. Because I'm like loudmouth online, that's my new persona for 2023 or whatever. Well, Husky Face gave me access to their posting and their blog.

Speaker 2 | 25:11.384

Sweet, sweet. How hard is it to get access to that? Like how many people?

Speaker 1 | 25:17.129

Super easy. But right now I'm one of the first like 40 people that can.

Speaker 2 | 25:23.015

Nice, nice. You can set the standard, man.

Speaker 1 | 25:26.318

I can show you how to get on. Right. But we can also use like communal account for blog posts and paper.

Speaker 2 | 25:35.767

Gotcha.

Speaker 1 | 25:36.956

papers especially i'm just like basically what you do for a paper you write it correctly put it in the arcs of template and then upload it and then you link it to your hugging phase and then we can make a blog about that and then post about that and those blogs and posts will be among the first like hundred you know so we should do that yeah yeah

Speaker 2 | 25:59.568

like like we were chatting about that before i think people are probably going to be doing it anyways but i think the ones who do it maybe well and strategically, they can build credibility in the, let's just call it an art form, right? So the advantage, I think, of a group like ours, like the one you created, is that traditional academics aren't going to take it seriously. One. Two, they're going to be maybe worried about getting involved with it. Because like any traditional industry that's being disrupted, the traditional academic publishing industry doesn't want to change. Right. People make money off it. The big academics have made their entire career on the publish or perish methodology, which. I don't think it's going to work forever. And it's not working. So doing, creating, I guess, a movement of publishing quality AI augmented articles, right? But they're still quality and still have some purpose at the end of the day, ideally for social good. Will, I think, be... big in a way and could further whatever the goals are of our community which i think are related to social good and sharing knowledge on new technologies etc kind of like what um i don't know how to pronounce his name but the other dude was here saying how he like come coming to a community for news right curating that knowledge is essentially what a lot of big papers are like the meta-analysis if you've read them or the systematic reviews you Those are the big articles that tend to get a lot of hits. That and expensive randomized controlled trials, which not a lot of people can do, right? But other than that, the meta-analysis and the systematic reviews. Essentially, what we could potentially do, and we can chat about this more with others who want to write, is how do we create a faster system of summarizing important literature in our field in a useful way for readers and or academics? That's kind of a thought that I had. I don't know. What do you think?

Speaker 1 | 28:19.348

That sounds like a lot of work.

Speaker 0 | 28:23.211

But, well,

Speaker 2 | 28:24.852

if we can automate it to some degree, you know, right? Like, we can start small, of course. whatever posts you want, blog posts, opinion pieces, editorials, short 500 word type stuff. But formalizing it in a way for academics, I think, could be an interesting way. It's just a format, man. It's just a template that you follow at the end of the day. And just a lot of hours in terms of collecting the literature, reading it. and then coming up with a summary to some degree, which I think you can automate, to be honest.

Speaker 1 | 28:59.947

Yeah, I have been collecting those tools on GitHub, so I have a pretty solid knowledge base of the tools that exist today, I would say.

Speaker 2 | 29:11.395

Sweet, yeah. And I shared some of the ones that I've heard in my circles and stuff that people are criticizing because I think they're scared of it. But if they can be improved upon... then I think we could disrupt the academic publishing industry, which is also like a billion dollar industry itself. And if you add in all the, if you add in the consulting piece, right? Because like consultants put out literature slash higher academics often to do pieces for them. there is a decent market for something like this. Not that money is the focus, but you kind of sometimes need money to grow things. And I always liked the idea about disrupting traditional industries that I think are limiting human capacity. And I think the academic industry is kind of not helping a lot of people versus trying to exploit them. Yeah, so we can chat more, and you can tell me what your thoughts to start were for getting out written work.

Speaker 1 | 30:27.657

Well, whatever we do, I think we should basically write it up, mostly not using AI, but also, I guess, using AI. And the hugging face focus is technical?

Speaker 2 | 30:44.486

Yeah. Yeah, so I... I... I think like the meetings that we have here, like we discussed, and I tried to play around with Spanish as well. I don't really know how much I like it yet. I'll need someone else.

Speaker 1 | 30:57.985

Exactly. But like, how many times have I seen this, you know? Oh yeah. I have a great project management thing.

Speaker 2 | 31:06.136

Yeah, yeah, but it actually works.

Speaker 1 | 31:08.637

It doesn't actually manage anything for you, you know?

Speaker 2 | 31:11.259

No, no, but if it can summarize the talks that you put on, right, and then we can publish those on Hugging Face, whatever, and they get hits, they get interest, we can grow from it, right? I think any tools that can make that process easier are beneficial. I just sometimes think you need someone who has experience with the tool to introduce you to all the features. versus just trying it yourself as a noob and saying you hate it because you don't really know how to use it. And so I...