#KnowYourAI: A Simple Framework for Human-AI Relationships

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Why Does it Matter?

Understanding AI's role in society is crucial for several reasons:

- To avoid negative effects of AI as an individual.
- To make decisions understanding what's at stake when AI is in the mix.
- To make sure AI doesn't get adopted by humans like fire was.
- To be a responsible data citizen.
- To make sure AI won't become an independent entity.
- To navigate the business opportunities unlocked by AI.
- To mitigate the risks posed by AI for yourself and your communities.
- For Environmental, Social, and Governance (ESG) compliance.

You can refer to the full framework and ongoing updates at:

- GitHub Repository
- The Diary of a #DataCitizen

AI as a Tool (Human-Controlled AI)

Attribute	Details
Description	AI acts purely as a tool that is fully controlled by humans, enhanc-
	ing human capabilities by automating routine tasks or providing
	analytical insights.
Examples	AI-powered data analytics tools, Predictive text or grammar
	checkers, Image enhancement software
Human Role	Decision-maker, supervisor
AI Role	Supporting tool, augmenting human tasks
Key Characteristics	Humans retain full control over the process, AI assists by offering
	speed and efficiency, AI operates under strict parameters set by
	humans
Risk Likelihood	Low
Risk Impact	Low
Resources	
	• Course: AI for Everyone by Andrew Ng (Link)
	• Course: Machine Learning for Beginners (Link)
	• Book: Artificial Intelligence: A Guide for Thinking Humans (Link)
	• Tool: Google Cloud AI Tools (Link)
	• Movie: Iron Man (Link)

AI as an Assistant (Collaborative AI)

Attribute	Details
Description	AI works alongside humans in a collaborative capacity, making
	recommendations and helping to solve problems. Humans retain
	the final decision-making authority.
Examples	Virtual assistants (e.g., Siri, Alexa), AI in customer service (chat-
	bots), Decision support systems
Human Role	Partner, guide, decision-maker
AI Role	Assistant, advisor, providing inputs and recommendations
Key Characteristics	Collaborative interaction, AI learns from human feedback, Hu-
	mans and AI co-create solutions
Risk Likelihood	Medium
Risk Impact	Medium
Resources	
	• Course: AI and Robotics: Collaborative Systems (Link)
	• Book: Human + Machine: Reimagining Work in the Age of AI (Link)
	• Platform: IBM Watson Assistant (Link)
	• Movie: Her (Link)

AI as an Augmenter (Human-AI Symbiosis)

Attribute	Details
Description	AI augments human capabilities, allowing humans to extend their
	cognitive, physical, or sensory abilities beyond natural limits.
Examples	AI-enhanced creativity tools, Wearable AI devices, AI in person-
	alized learning platforms
Human Role	Co-creator, augmented operator
AI Role	Cognitive or physical augmenter, enabler
Key Characteristics	AI enhances human performance in real time, Seamless integration
	between human intuition and AI processing
Risk Likelihood	Medium
Risk Impact	High
Resources	
	• Course: Cognitive Technologies: The Real Opportunities for Augmenting Human Abilities (Link)
	• Book: Superminds by Thomas W. Malone (Link)
	• Tool: OpenAI's GPT-4 (Link)
	• Movie: Ghost in the Shell (Link)

AI as a Manager (AI-Led Decision Making)

Attribute	Details
Description	AI takes on more responsibility by making decisions within defined
	areas, with limited human oversight.
Examples	Autonomous vehicles, Algorithmic trading in finance, AI-driven
	supply chain management
Human Role	Supervisor, parameter setter
AI Role	Manager, decision-maker within constraints
Key Characteristics	AI operates with a high degree of autonomy, Humans set param-
	eters but rely on AI for execution
Risk Likelihood	High
Risk Impact	High
Resources	
	• Course: Artificial Intelligence for Decision Making (Link)
	• Book: Prediction Machines (Link)
	• Tool: Tesla Autopilot (Link)
	• Movie: I, Robot (Link)

AI as an Autonomous Agent (AI Independence)

Attribute	Details
Description	AI systems function with full autonomy, requiring little to no hu-
	man intervention.
Examples	AI in military drones, Fully autonomous research systems, Au-
	tonomous self-improving AI
Human Role	Observer, designer
AI Role	Fully autonomous entity, decision-maker
Key Characteristics	AI operates independently and adapts to new situations, Minimal
	to no human intervention after deployment
Risk Likelihood	High
Risk Impact	High
Resources	
	• Course: Robotics and Autonomous Systems (Link)
	• Book: Architects of Intelligence by Martin Ford (Link)
	• Platform: Boston Dynamics (Link)
	• Movie: Ex Machina (Link)

Appendix A: Risk Rating Legend

- **High Risk**: Significant risks associated with this category (e.g., AI as a Manager or Autonomous Agent).
- Medium Risk: Some risks, requiring careful oversight (e.g., AI as an Assistant or Augmenter).
- Low Risk: Minimal risks when used responsibly (e.g., AI as a Tool).

Appendix B: RDF and OWL File References

The RDF and OWL files that define the framework are available on GitHub:

• RDF File: AI-Human Relationships RDF

• OWL File: Ontology OWL

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