Education

Texas State University
PhD in Computer Science
San Marcos, Texas
May 2023

University of Texas Rio Grande Valley
M.S. in Computer Science
Edinburg, Texas
August 2021 - May 2023

Publications

Building Squares with Optimal State Complexity in Restricted Active Self-Assembly
ROBERT M. ALANÍZ, DAVID CABALLERO, SONYA C. CIRLOS, TIMOTHY GOMEZ, ELISE GRIZZELL, ANDREW RODRIGUEZ, ET AL.
- Received the best student paper award.

Reachability in Population Protocols is PSPACE-Complete (Short Abstract)
BIN FU, TIMOTHY GOMEZ, ELISE GRIZZELL, ANDREW RODRIGUEZ, ROBERT SCHWELLER, TIM WYLIE

Reachability in Pikmin Cave Sublevels is PSPACE-Complete (Short Abstract)
ANDREW RODRIGUEZ

Experience

Texas State University — Department of Computer Science
Teaching Assistant
San Marcos, Texas
August 2023

Projects

AutoTile
Tile Automata Simulator
Software created to assist in self-assembly research, written in Python.

Pascal Compiler
Written Using C, Lex, and Yacc
A Pascal Compiler that implements most of the language features. Includes the lexical analyzer, parser, and code generator.

PintOS
Operating System Written in C
Expanded on a toy OS to include priority scheduling, argument passing on the stack, system calls for user programs, virtual memory, and a multi-level indexed file system.

JOS-On-JOS Para-Virtual Hypervisor
Hypervisor Written in C
Designed a hypervisor that ran JOS as a guest on top of a JOS host. Implemented Guest OS bootstrapping, extended page tables, and hyper calls.