

DANIEL MIHOVCH

732-239-5689 | dmihovch@udel.edu | linkedin.com/in/danielmihovch | github.com/dmihovch

Education

University of Delaware

Bachelor of Science in Computer Science, conc. Systems & Networks

Newark, DE

Aug. 2023 – May 2027 (Expected)

Experience

Four Youth Productions

Studio Operations Assistant & System Administrator

Wilmington, DE

June 2025 – Present

- Maintained studio electronic systems: security system, NAS system, multiple Apple desktop systems
- Planned and prepared lessons for over 300 students across 4 schools
- Managed multiple community events to showcase student work

Four Youth Productions

STEM Instructor

Wilmington, DE

Feb. 2025 – Present

- Designed & led engaging after-school STEM lessons for underrepresented youth in Wilmington, DE public schools.
- Focused lessons teaching foundational environmental science, biology, physics, computer science and chemistry.
- Taught students from grades Pre-K – 8th

University of Delaware CIS

Computer Architecture & Systems Programming Teaching Assistant

Newark, DE

Jan. 2025 – Present

- TA for CISC210: Introduction to Systems Programming, CISC260: Computer Architecture & Assembly Language
- Assisted in teaching students the C programming language, ARMv8 assembly, Bash, Unix systems, and interacting with hardware from software via Raspberry Pi
- Assisted with lecture, held office hours, graded assignments

University of Delaware CIS

Introduction To Programming Teaching Assistant

Newark, DE

Jan. 2025 – Present

- TA for CISC106: General Computer Science for Engineers
- Led a weekly practicum session for 25+ students, consisting of a mini-lecture and activity, teaching the fundamentals of computer science with the Python programming language
- Held office hours, graded assignments

Projects

Piemulator | C, ASM, Bash, Raspberry Pi

November 2025 – Present

- Created a Hardware Abstraction Layer that serves as a drop-in replacement for the University of Delaware's libsense Raspberry Pi Sense Hat library
- Focused on portability and ease of use, currently only depends on pthreads. Earlier versions also depended on ncurses, but this has since been simplified to ANSI escape codes
- Students can test and develop projects without always needing access to the physical Raspberry Pi, simply needed to link against my libpie instead of the provided libsense

16 bit Virtual Machine | C

August 2025 – Present

- Single tasking, 16 bit toy virtual machine written in C
- Implemented my own risc-style ISA featuring a segmented memory model and multiple addressing modes
- Currently writing a companion assembler to avoid having to write raw bytecode programs

Technical Skills

Languages: C, Go, Bash, Python, Typescript/HTML/CSS

Operating Systems: Linux, OSX, Windows

Frameworks/Libraries: CUDA, SDL, ncurses, React/Svelte