Miles Benton

EDUCATION

Bachelor of Computer Science

Aug 2021 - Dec 2023 (expected)

California State University - Chico

EXPERIENCE

Web Developer
Chico ACM

Aug 2022 - Present
Chico, California

- Created and maintained a website for the Chico chapter of the Association for Computing Machinery.
- Used WebAssembly to allow deterministic timing and asymptotic analysis of competitive programming problems.
- Implemented visualizations of common data structures for web interface.
- Complete with competition functionality used to host a local programming competition for Chico students.

PROJECTS

Snail Maze++, snail.meters.sh

Nov 2022 - Present

- Idle game based around simulating different maze-solving algorithms.
- Heavily optimized code, can simulate hundreds of thousands of maze solving algorithms in the browser using WebAssembly and Web Workers.
- SolidJS frontend with simulation code in Rust.

Chico ACM Website, chicoacm.org

Dec 2021 - Present

- A competitive programming judging website with deterministic timing.
- NextJS frontend and Actix Web (Rust) backend.
- Leverages a WebAssembly compile target for low-overhead sandboxing.

Acolyte Jan 2020 - Jun 2020

- A web forum with threaded comments and live chat created for educational purposes.
- Go backend with vanilla JavaScript frontend.

Table Tennis Robot Dec 2019 - Feb 2020

- Modified an off the shelf table tennis robot with an app to emulate features of more advanced products.
- Python server in on Raspberry PI connected to an Arduino emulates the hard-wired remote to the table tennis robot.
- Flutter companion app to automatically connect to and send commands to the server.

SKILLS

- \bullet TypeScript
- Rust
- Python
- C++