Youwen Wu

✉ youwen@ucsb.edu
⌨ youwen5
in Youwen Wu
🔗 youwen.dev

Curriculum Vitæ

Education

2024 – 2028	**B.S. Mathematics**, *University of California, Santa Barbara*, 4.0/4.0, Dean's Honors
2024 – 2028	**B.S. Computer Science**, *University of California, Santa Barbara*

Experience

11/2024 – Present	**Systems programmer**, *UC Santa Barbara – Robotics Lab*, Designed reproducible and purely functional hermetic build systems. Creating 3D simulacrums of laboratory experiments that are reproduced in real life, using Rust, C++, React, and Three.js.
11/2024 – Present	**Package maintainer**, *NixOS Foundation*, Maintaining core system packages for the NixOS system distribution, an advanced *purely functional* GNU/Linux distribution built on the Nix package manager and Nix programming language. NixOS has over $18,000$ GitHub stars and users.
09/2022 – 06/2024	**Artificial intelligence lead**, *FIRST Robotics Team 1280*, Worked on autonomous decision making and path planning algorithms. Replaced the venerable *BozoAuto* autonomous subroutine with the *DeepBozo* autonomous suite. Designed a novel robot control dashboard with 3D visualization using Rust, Tauri, and Svelte. Won 2022 Monterey Bay Regional Competition.

Skills

Languages	Rust, TypeScript, Haskell, Python, C++.
Technologies	React, SvelteKit, Tauri, Next.js, Elm.
Developer Tooling	Nix and NixOS, Docker, Linux, and NixOS based service deployment and system administration.

Awards

1/2025	**SB Hacks XI Winning Project** 1st place at hackathon with 300+ participants from University of California campuses for building an AI powered apartment finder.
2/2024	**National Merit Semifinalist** Issued by National Merit Scholarship Corporation.