Benjamin Hinchliff

benjamin.hinchliff@gmail.com | 925-255-1550 | benjaminhinchliff.com | https://github.com/BenjaminHinchliff | linkedin.com/in/benjamin-hinchliff-15b125180

Education

California Polytechnic State University, San Luis Obispo (Cal Poly)
Bachelor of Science Degree in Computer Science 2024-2025
GPA: 3.79 (President's Honors List)

Skills

Programming Languages: Python, HTML, (S)CSS, JS (& TS), PHP, WASM; Java, C, C++, Rust, Zig, Assembly (x86, x86_64, arm64)
Web Frameworks: React, Vue, Angular, jQuery, & Svelte
Databases: SQL (mySQL, PostgreSQL), MongoDB
Applications: VSCode, Visual Studio, (Neo)Vim, Microsoft Office / LibreOffice
Application Development: Familiarity with Windows API, GTK+, QT, WxWidgets, FLTK, Linux/Unix
Paradigms: OOP & Data Driven Programming

Computer Science Experience

Full-stack Software Developer - Versational (versational.ai) (40 hrs/wk) June – Sept. 2021
Technologies used: Next.js (React), AWS, Redux, AssemblyAI

- Created dashboard for the consumer analytics platform Versational
- Built platform integration with AssemblyAI transcription API, front-end and back-end
- Connected speakers to user accounts
- Integrated the machine learning ("Gems") identification models into the platform and dashboard
- Fixed bugs throughout the platform, such as credential leakage to the frontend

Software Developer - VenAdvisory (venadvisory.com) (40 hrs/wk) June – Sept. 2020
Technologies Used: WordPress (PHP), HTML, CSS, JS

- Built WordPress (PHP) front-end and back-end to create new transcripts for customer analysis
- Identified & fixed security issues including XSS & SQL Injection
- Gained professional experience working with an offshore development team

Other Related Experience

- Advise & maintain websites for East Bay businesses, e.g. Ristorante Amoroma (amoroma1.com)
- Tech consultancy for home community: high school, scouts, friends and family

Programming Projects Examples

Full (uncurated) list at https://benjaminhinchliff.com/projects
Raytracer - https://github.com/BenjaminHinchliff/raytracer
Technologies Used: C11, Meson

- Multithreaded, SIMD optimized raytracer written in pure C with model loading

Portfolio Website - https://benjaminhinchliff.com
Technologies Used: Svelte(kit), SSR, HTML, SCSS, TS, JS, GraphQL, Vite

- Uses SSR and caching techniques to (optionally) work without JS
- Compact, using a production framework and a real build system

Dungonator - demo: https://benjaminhinchliff.github.io/dungeonator-demo
Technologies Used: C99, CMake, C++ & Catch2 (for tests), doxygen (for docs)

- Core code written entirely in standards-compliant C99
- Fully documented: https://benjaminhinchliff.github.io/dungeonator

Leadership and Campus Involvement

Student Campus Computing Committee (SC3) - Department of Computer Science Representative

- Advise the committee on Cal Poly technology use from a student perspective

Solar Regatta Club - Co-developer

- Collaborating to determine technical specifications and creating the software side (MicroPython) of the boat used in the California Solar Regatta competition

Cal Poly Linux Users Group (**CPLUG) -** Member

- Advocate and enable Linux usage and support at Cal Poly