Alan Shiah

LinkedIn | alan@alanshiah.com | alanshiah.com | [redacted] | GitHub

Skills

- C++ | Python | Java | Git | BASH | HTML | CSS | MySQL | PostgreSQL | Nmap | Wireshark | Burp Suite
- Data Structures and Algorithms | OOP | Unit Testing | Linux | Kali Linux | Pen Testing | Network Enumeration | Network Traffic Analysis
- Application | Embedded | Frontend | Backend | Full-Stack | Red Team | Blue Team | Purple Team | English

Education

Bachelor of Science — **University of California, Irvine** — *Irvine, CA, USA* — **09/2024 - 07/2026**

- Majoring in Computer Engineering

Community College for Transfer — **De Anza College** — *Cupertino, CA, USA* — **08/2022 - 07/2024**

- Majoring in Computer Science and Computer Engineering

Experience

Software Engineer Intern — **NeuroLeap Corp** — *San Jose, CA, USA* — **05/2024 - Present**

- Developing and implementing software enabling communication between microcontrollers and proprietary hardware using I²C protocol.
- Supporting the team in maintaining software integrity through testing and troubleshooting, actively contributing to bug resolution efforts.
- Actively participating in weekly meetings focused on proprietary software and hardware, contributing insights and collaborating on development plans for software and hardware interaction.
- Assisting in the implementation and testing of proprietary software aimed at assessing the presence of disabilities in children.

Software Engineer — **Boundary Remote Sensing Systems** — *Remote, CA, USA* — **07/2024 - Present**

- Developing specialized algorithms utilizing Computer Vision with PyTorch to detect X in Y (proprietary) denoted by bounding boxes.
- Collaborating with auxiliary development teams to integrate these algorithms into the main codebase.
- Delivering detailed weekly updates on development progress, challenges, and strategic insights during team meetings.
- Contributing to the development of proprietary machine learning software aimed at environmental land reclamation and sustainability.

Projects

- **MacroPilot Suite:** Developed open source software with GUI for automating desktop tasks, currently featuring an autoclicker with highly customizable settings. Currently expanding functionalities with an auto keyboard clicker, macro automation recorder/player, and keybinder. ***Current Downloads: 100+*** and can be found at SourceForge MacroPilot or GitHub Repository
- **Portfolio Website:** Created a professional portfolio website from scratch to showcase my skills, projects, and achievements. This can be found at alanshiah.com.
- **Dev Blog:** Regularly contribute posts on Dev.to, sharing expertise and insights on software development/ethical hacking when inspired to contribute to the community. This can be found at Dev.to
- **Terminal-based Kelley Blue Book:** Developed a server-client application, enabling bidirectional communication between server and client. Server-side awaits incoming connections, processes .properties files, and stores interpreted data in custom car class. Client-side is able to connect to the server, upload .properties files, and access existing stored car object data.
- **Conway's Game of Life:** Programmed an interactable GUI simulation of Conway's Game of Life, a cellular automaton created by John Conway in 1970. Simulates cells' interactions based on predefined rules, creating emergent patterns.
- **Connect Four:** Created a simple terminal-based Connect Four game using Python to experiment with algorithms to check valid matrix solutions.
- **CIS-22B Itty Bitty Airfreight:** Developed an application that reads, organizes, then stores airfreight shipment data from a file. Rejects certain airfreight shipments based on custom shipment constraints. Information is presented in a neat format in the terminal.

Mentorship

- **Cyberpunks:** Cybersecurity club Founder and President | Mentored ~20 students concurrently | Members: ~160 **(08/2022 - 07/2023)**

Others

- **Trace Labs**: Volunteered as a judge for Trace Labs' missing persons OSINT search party CTF **(Occasionally)**
- **Summa Cum Laude**: Graduated Milpitas High School with over a 4.0 weighted GPA **(07/2022)**
- **AP Scholar**: Received AP scholar award for taking multiple AP classes, and passing their associated examinations **(08/2018 - 07/2022)**
- **3rd Place Ukiah Science Olympiad Invitational**: Won 3rd place in Ukiah Science Olympiad for Protein Modeling in Division C **(02/2020)**