# 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**

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

**Computer Hardware Technician** — **CompTechS Internship** — *Cupertino, CA, USA* — **11/2022 - 02/2023**

- Diagnosed and resolved hardware or software issues on around 5+ refurbished computers per day.
- Provided impoverished or disadvantaged students with access to refurbished personal computers and free technical support.
- Zeroed out computers to securely erase all data from the hard drive to prevent unauthorized access to student information.
- Installed, configured, and tested operating systems and software for refurbished computers.

## 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: 60+*** and can be found: 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.
- **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.
- **Sudoku Solver:** Programmed a Sudoku solver to experiment with utilizing a recursion backtracking algorithm constrained by bounding functions.

## Mentorship

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

## Others

- **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)**