

Kevin A. Li

kevin.li.actual@gmail.com | (281) 728-8334 | <https://www.linkedin.com/in/krazykevinli/> | kevin-a-li.vercel.app

EDUCATION

The University of Texas at Austin (Electrical and Computer Engineering) **GPA: 3.91/4.0** **Dec 2022**

Relevant Courses: Software Design, Software Testing, Algorithms, Computer Architecture, Computer Vision, Cybersecurity

EXPERIENCE

Performance Software Engineer at Arm **Spring 2023 - Present**

- Architected an Ansible-based benchmark automation framework which now holds over twenty open-source benchmarks, all of which are thoroughly tested and documented. Currently, this tool has over ten internal users who use it as their primary
- Designed the team's main MongoDB benchmark result query tool capable of CRUD operations in addition to several "smart" features, such as fuzzy-matching on results, retrieving relevant data even if the query is slightly malformed
- Architected an async benchmark profiling platform capable of running multiple in-band and out-of-band profilers simultaneously on a benchmark command, with extensibility added for additional telemetry gathering options
- Delivered a lab-hardware automated reservation system capable of supporting both human and auto-users. It is implemented with a MongoDB database, Flask backend, and React frontend
- Installed, configured, and debugged hundreds of infrastructure machines and systems in our hardware lab
- Designed and developed over twenty CI/CD pipelines for tooling and automated regression benchmarking

Software Engineering Intern at bp **Summer 2022**

- Worked with a team of software engineering, UI/UX, and data engineering interns to develop a full-stack (React, Flask, MongoDB) web app which tracks the ROIs of simulated small scale wind turbines across global bp retail sites
- Researched and developed wind and solar computational models using NumPy, and used Pandas to clean underlying data
- Developed the Python Flask REST backend with a scalable software architecture, utilizing OOP design patterns
- Worked with a UI/UX engineer to create the React frontend using MaterialUI, Bootstrap, and ReactStrap
- Deployed the web app with AWS EC2 and managed the production environment post-deployment

Controls Engineering Intern at Samsung Austin Semiconductor **Summer 2021**

- Implemented two sensor monitoring dashboards in Python to track chemical reaction stability
- Software is thoroughly tested and incorporates multi-phase error handling, having not failed at all after release (>5 weeks)
- Worked hands on with electrical and mechanical hardware, performing control system hardware debug and repair

Product Engineering Intern at Cirrus Logic **Summer 2020**

- Developed a Python automation platform for burn-in test script format translation between ATP, VEC, and related formats
- Developed JMP scripts for use in wafer-yield statistical analysis, halving analysis runtime per-run
- Gained exposure with semiconductor quality analysis, such as six sigma methodology and yield graph analytics

ACADEMIC PROJECTS

College Handsign Detector **Spring 2022**

- Webcam-based handsign detector able to detect and categorize multiple human hand signs in real time
- Utilized machine learning (K-Means, Nearest Neighbor, MediaPipe Hands) to perform detection and classification
- Supervised training performed, with NumPy, SciKitLearn, OpenCV utilized for data processing

Full-Stack HAAS App **Fall 2021**

- Full stack application for hardware inventory and management, able to process check-out/in requests for users
- Python Flask backend, React/CSS frontend, MongoDB database, Heroku cloud deployment
- Confluence documentation, with Jira board used for AGILE development (team of five)

Computer Vision Assisted Video Game and Job Application Bots **Summer 2020**

- Created a Python bot for emulating players in an online video game, generating massive virtual profits at no human time cost
- Created a Python bot for applying to jobs on LinkedIn, enabling thousands of job applications to be automated
- Bots utilize natural language processing, image processing, open-source machine learning, and mouse/keyboard automation to emulate human actions. The bots utilize media capture APIs and error logging to document tasks they cannot perform

SKILLS AND ADDITIONAL INFORMATION

Computer Skills: Python, Java, C, C++, SQL, MongoDB, React.js, HTML/CSS, JavaScript, ARM Assembly, JMP, VBA, Git, Azure DevOps, Azure Cloud, Oracle Cloud, AWS, Microservices, Docker, UI/UX, CI/CD, Ignition HMI, Linux/Unix, Test Frameworks (PyTest, JUnit) for Unit and Integration Testing, MS Office Suite, Power BI, Power Apps, Microcontrollers, Figma, MURAL, Networking, BASH scripting, Pandas, JSON, Web Scraping, OOP Design Patterns, Pandas, WSL, Serverless, UML, PEP, SCADA