Ethan Liu

 $562-412-3749 \mid eliuusa@gmail.com \mid linkedin.com/in/ethan-liu- \mid github.com/WebForks \mid \underline{ethanliu.dev}$

Education

California State University Long Beach

Bachelor of Science in Computer Science

• Courses: Application Development, Data Structures and Algorithms, Artificial Intelligence, Machine Learning

EXPERIENCE

Software Engineer

 $Tone \ Software \ Corporation$

- Developed a Python-based web testing application enabling remote testing and viewing of mainframe products.
- Migrated backend services from a legacy architecture to a new platform, enhancing system scalability, performance, and maintainability.
- Set up and configured an LDAP directory service in Docker containers on a Linux environment, centralizing authentication and streamlining user management.

Software Engineer Intern

Tone Software Corporation

- Developed C# CLI tools to enhance GUI interfaces for seamless connectivity with IBM mainframe systems.
- Set up and configured a self-hosted MinIO S3 service on an Ubuntu server to support scalable and secure file storage solutions.
- Designed and implemented JCL scripts for IBM mainframes, enabling efficient file transfer operations between mainframes and the S3 service.
- Created a Python program to enable seamless execution of JCL scripts directly from VSCode, allowing users to connect to and run jobs on their choice of z/OS mainframes with proper access.

Application Developer Intern

Siemens Digital Industries Software

- Converted OpenRoad and Perl user scripts from Ingress to PostgreSQL syntax for the PostgresSQL migration.
- Developed and integrated a Java SpringBoot REST API to enhance website functionality and user experience.
- Collaborated in the development and refinement of the website using Vue.js and Bootstrap, significantly improving usability and user interface design.
- Revamped critical Perl and Python scripts, enhancing connections to the Ingress database and AWS, resulting in a noticeable 10% speed optimization
- Contributed to the integration of GPT technology for a user-assistance bot, enhancing website interactivity and providing comprehensive user documentation for improved user experience.

Projects

Image Scraper | *Python*, *Docker*, *Selenium*

- Engineered a Python script for efficient extraction of .jpeg files from network communications associated with the website, streamlining data retrieval and analysis processes.
- Configured Docker Compose for seamless deployment and execution on headless systems.
- Incorporated multi-threading and asynchronous tasks, significantly boosting the scraping process's speed and efficiency.

DiscordCloud | Sveltekit, NodeJS, Tailwind, Zod, SQLite, Python, Discord API

- Leveraged REST API to fetch and send messages, integrating it seamlessly into the application.
- Utilized SvelteKit for dynamic front-end development, incorporating server-side rendering and Tailwind CSS for an enhanced user interface.
- Developed a robust NodeJS backend to manage account creation, handle complex queries to the SQLite database and split and send files to Discord.

TECHNICAL SKILLS

Languages: Java, Python, SQL, JavaScript, HTML/CSS, C++, TypeScript, C#, JCL, Perl Frameworks: React, SvelteKit, Django, VueJS, Node.js, Express.js, Bootstrap, Tailwind CSS Developer Tools: Git, Docker, Firebase, Visual Studio, PyCharm, IntelliJ, Eclipse, JIRA, Jenkins, AWS, Heroku

December 2024 - June 2025

June 2023 – Present

Costa Mesa, CA

Anaheim, CA

Anaheim, CA

Long Beach, CA Aug. 2021 – May 2025

June 2025 – Present