Jeremiah Soe

Irvine, CA | (909) 786-9227 | jeremiahjsoe@gmail.com | github.com/fiveminus1

EDUCATION

University of California, Irvine — Irvine, CA

Bachelor of Science in Computer Science, Minor in Informatics — *Expected June 2026*
- *Relevant Coursework*: Data Structure Implementation & Analysis, Design & Analysis of Algorithms, Information Retrieval, Intro to Data Management, Intro to Artificial Intelligence, Intro to Security and Privacy

EXPERIENCE

Software Developer - UCI ICS Student Council — Apr. 2025 – Present

University of California, Irvine — *Irvine, CA*
- Collaborating with a team of 8 to develop and maintain full-stack features for PeterPortal, a widely used academic planning tool at UCI, using **React**, **TypeScript**, **SASS**, **PostgreSQL**, **Drizzle ORM**, and **tRPC**.
- Refactored and redesigned the course/professor review form, improving layout structure and text readability while modernizing a legacy UI for long-term maintainability.
- Implemented support for importing AP credits from Zot4Plan planners into PeterPortal, improving continuity for students migrating from a legacy planning tool.

Chair of Public Relations - UCI ICS Student Council — Jul. 2024 – Jul. 2025

University of California, Irvine — *Irvine, CA*
- Led a team of 7 to manage the club's social media presence, delegating tasks to ensure timely execution.
- Coordinated with other committees to create and promote announcements for weekly events such as alumni Q&As and a web development hackathon with over **240 sign-ups**, ensuring consistent communication across platforms.

Learning Assistant - ICS 33: Intermediate Programming with Python — Sep. 2024 – Dec. 2024

UC Irvine Donald Bren School of Information and Computer Sciences — *Irvine, CA*
- Supported **over 200 students** with advanced Python programming concepts, including unit testing (**Pytest**), object-oriented design, recursion, databases (**SQLite**), functional programming, and decorators.
- Collaborated with graduate teaching assistants to clarify challenging topics such as asymptotic analysis, generator usage, and database interactions, ensuring consistent student support during lab sessions.

PROJECTS

Quote Book Bot | *Rust, Docker, PostgreSQL, AWS, Github Actions* — Jul. 2025 - Present
- Built a Discord bot in **Rust** for logging and tracking quotes, utilizing the *Serenity* library and *Poise* framework.
- Designed a **PostgreSQL** backend in *SQLx* and integrated the *Notion API* to sync quotes to a Notion database.
- Implemented a CI/CD pipeline with **Github Actions** to automate **Docker** builds and continuous deployment to an **AWS EC2** instance.

Fabflix | *Java, JavaScript, Apache Tomcat, MySQL, AWS, GCP, Docker, Kubernetes* — Jan. 2025 – Mar. 2025
- Developed a full-stack movie browsing site using **JavaScript**, **HTML**, **CSS**, **Apache Tomcat**, and **MySQL**.
- Engineered a high-availability database architecture by implementing **MySQL Primary-Secondary replication** on a **load-balanced Tomcat/MySQL cluster** across **AWS** and **Google Cloud** instances, ensuring data consistency and availability.
- Containerized the application using **Docker** and orchestrated deployment with **Kubernetes** on **AWS**, implementing a **multi-service architecture with session persistence**.

Sprite Type | *Next.js, React, MongoDB, Tailwind CSS* — Jan. 2025
- Developed a Studio Ghibli-themed typing test web game during a 36-hour hackathon, featuring animated custom selectable character sprites and real-time WPM tracking.
- Built and deployed a full-stack web app using **Next.js** for server-side rendering and API routing, **MongoDB** for database management, and **Tailwind CSS** for styling, hosted on **Vercel**.
- Integrated functionality to set WPM goals and provide feedback on target achievement.

TECHNICAL SKILLS

Programming Languages: Python, Java, Rust, HTML, CSS, JavaScript, TypeScript, C, C++, Swift, Dart, SQL
Libraries & Frameworks: React, Next.js, Node.js, Tailwind CSS, SwiftUI, Flutter, Drizzle ORM, Spring, Pytest
Technologies: PostgreSQL, MySQL, SQLite, Firebase, MongoDB, Github Actions, Docker, Kubernetes, AWS, Google Cloud, Apache Tomcat, Apache Maven