

Jeffrey Yue

Software Engineer

San Diego, CA • yuejeffrey612@gmail.com • (858) 472-9357 • <https://jkio612.github.io/site/>

Talented Software Engineer with a wealth of experience delivering dynamic solutions including mobile applications and complex web platforms within fast-paced environments. Enjoys 3-D printing, hiking, piano, and basketball (Go Clippers!).

Technical Skills

Programming Languages: Java, Python, C, C++, Kotlin, Verilog/SystemVerilog, Kotlin, LaTeX, JS, Ruby, HTML/CSS, C#

Dev Tools and Frameworks: Git, Jira, MatLab, MARS, Linux, Word, Excel, Figma, Github, Flutter, Firebase, Docker, MongoDB

Concepts & Methodologies: Scrum, Agile, Machine Learning, Embedded Systems, Computer Networks

Education

University of California, Santa Cruz

Santa Cruz, CA

B.S. in Computer Engineering

Sep. 2020 - June 2024

Relevant Software Projects

Full-stack quiz web and mobile application using Flutter, Firebase, and Dart

Mar. 2023 - June. 2023

- Implemented **Google** Account backend authentication for login functionality by integrating the **Google API**, utilizing **OAuth 2.0** and **JWT**, and applying continuous integration and source version control to ensure secure login.
- Evaluated debugging solutions by deploying automated tests such as unit tests, integration tests, and end-to-end tests using **Jest**, **Mocha**, **Jasmine**, **Cypress**, **Selenium**, **Puppeteer**, and **Playwright** to achieve a code coverage of **100%**.

Money-tracking Web Application using Flutter and Kotlin

Sep 2023 - Jan. 2023

- Developed a scrollable navigation bar using **Flutter**, refining user interface with smooth animations and transitions, and boosting overall app performance through efficient code minification and lazy loading.
- Implemented the integration of personal bank accounts into the application through the **Plaid API**, employing **React** and **Angular** for seamless user interaction and enhancing the server side with **Node.js**, **Django**, and **Express** to manage secure data handling, while optimizing data retrieval strategies using caching, load balancing, and **API** rate limiting, improving processing speed to under **100** ms.
- Deployed on Chrome, Android, and iOS using **blue-green** deployment and canary release, and assisted by **Jenkins** and **Ansible**, reducing firmware deployment time to **3** min.

Smart Doorbell System using Python

Mar. 2022- Apr. 2022

- Developed using **Python** on a Raspberry Pi 3 to emulate a Ring Doorbell system, using a **Flask** server for real time video streaming, and using an SR-04 sensor to detect motion at a certain frequencies, providing alerts for nearby movements at an accuracy rate of 90%

Work Experience

University of California

Santa Cruz, CA

Teaching Assistant

Dec. 2021 - Nov. 2023

- Assisted professors in educating younger students on software engineering basics through interactive coding workshops and a collaborative web development projects, fostering basic proficiency in technologies such as **Python**, **Java**, **C**, and **C++**
- Provided individual and group tutoring sessions in mastering C and C++ assignments by simplifying complex concepts and reinforcing fundamental principles, fostering an engaging and supportive learning environment.

Private Work

San Diego, CA

Software Engineering Tutor

July 2018 - Feb. 2020

- Assisted in a group of four volunteers with class schedule management, improving English and coding skills among first-generation international beginner and intermediate students.