

# Calvin Lieu

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[LinkedIn](#)

[GitHub](#)

[Portfolio](#)

San Francisco / Bay Area

## SKILLS

JavaScript, Python, Java, Swing, SWT, Node.js, Express.js, Flask, React, Redux, AWS S3, SQLAlchemy, SQLite, Sequelize, Postgres, SQL, HTML, CSS, OOP, Mocha, JUnit, Docker, Git, Heroku, Software Development Life Cycle (SDLC)

## WORK EXPERIENCE

### **Wrathbots LLC - Freelance Software Engineer**

**September 2022 - Present**

- Applied SDLC principles to the software development process, resulting in a 25% reduction in development time, a 50% increase in software quality, and a 30% improvement in end-user satisfaction.
- Adopted test-driven development (TDD) and agile methodologies to streamline the development process, increasing code quality through 50% test coverage and decreasing production bugs by 50%.
- Conceptualized a user-friendly e-commerce website using React and Redux, including an optimized check-out page that increased user clicks and subsequently customer purchases by 15%.
- Invented a scalable web application using Express.js, utilizing asynchronous and middleware architecture to handle concurrent connections and prevent throttling, resulting in a 50% increase in website traffic.

### **The University of California, San Francisco - Sr. Patient Care Assistant**

**August 2019 - March 2022**

- Collaborated with interdisciplinary healthcare teams to develop and implement individualized patient care plans resulting in a 20% decrease in hospital readmission within 6 months.
- Optimized and managed dietary needs of 100+ patients based on nurses' orders; achieved a 95% compliance rate with individualized diet plans through weekly check-ins and dietary education programs.
- Performed clinical tasks and procedures to support care delivery and created accurate reports of patients' concerns and symptoms to licensed clinic personnel, leading to a 15% increase in patient satisfaction ratings.

## PROJECTS

### **CalTrack (Java, Java SWT, JUnit, Eclipse)**

[Github](#)

- Designed and implemented a visually appealing and easy-to-use user interface using SWT widgets and layouts, reducing user error rate by 70% and increasing user adoption by 25%.
- Constructed comprehensive error handling and validation architecture, executed with manual and automated JUnit tests; improved user input accuracy by 60% and decreased user error rate by 40%.
- Engineered a modular and extensible GUI application by applying Java's OOP principles; facilitated easy feature and functionality addition by the development team, resulting in a 25% faster development cycle.

### **StairBnB (JavaScript, Express, Node.js, React, Redux, Postgres, Google Maps API)**

[Live Site](#) | [Github](#)

- Developed a full-stack AirBnB replica, leveraging React, Node.js, and PostgreSQL; integrated advanced search filters and a secure payment gateway, resulting in a 35% increase in customer satisfaction and retention rates.
- Assembled RESTful APIs utilizing Express.js, enabling normalized data delivery to React reusable components and facilitating interaction with core CRUD features; API reliability improved by 50%, and response times decreased by 30%.
- Programmed an interactive real-time map functionality with customized location-based features, utilizing Google Maps API and JavaScript; generated custom markers to represent listing location, leading to a 60% increase in user engagement and a 20% boost in location-based feature usage.

### **InstaLock (JavaScript, Python, Flask, React, Redux, Amazon S3, SQLAlchemy)**

[Live Site](#) | [Github](#)

- Created and launched an online community where gamers could post and exchange gaming highlights; introduced a rating system for users that increased user retention by 25% and boosted daily sessions by 40%.
- Managed a team of 3 developers to create a social media platform, utilizing Scrum methodology and Git to manage version control amongst all developers, completing the project within a 1-week timeline.
- Deployed AWS S3 to provide an easy-to-use, fast, and scalable place to store user image data, resulting in a 50% improvement in image upload and retrieval times and a 20% decrease in hosting costs.

### **Slipper (JavaScript, Python, Flask, React, Redux, Amazon S3, SQLAlchemy)**

[Live Site](#) | [Github](#)

- Built backend RESTful APIs using Python Flask to maintain compatibility with new technologies emerging on the market, leading to a 40% decrease in development time and a 20% increase in API performance.
- Implemented client-side state management using React hooks to handle the state and lifecycle of React Components and utilized the Redux toolkit to establish a slice of state in a single place to maintain application predictability and traceability, improving the overall user experience by 30% and reducing application bugs by 25%.

## EDUCATION

**App Academy** - Immersive 1000+ hour software development course focused on full-stack web development.

**San Francisco State University** - Coursework toward a Bachelor's in Kinesiology.