

# Calvin Lieu

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[LinkedIn](#)

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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

## WORK EXPERIENCE

### Upwork - Software Engineer (Contract)

September 2022 - Present

- Applied SDLC principles to the software development process, resulting in a 25% reduction in development time 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 customer purchases by 15%.
- Created 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)

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- 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)

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- Built RESTful backend 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.