

Calvin Lieu

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EXPERIENCE

Software Engineer

Upwork

Sep 2022 – Present

- Streamlined software development process by implementing **agile methodologies**, resulting in a 20% increase in productivity and a 30% reduction in defects.
- Engineered a user-friendly e-commerce website using **React** and **Redux**, including an optimized check-out page that increased user clicks and customer purchases by 50%.
- 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
- Collaborated with UX/UI team to design responsive web pages with an emphasis on accessibility, resulting in a 30% increase in user engagement among web users.

Senior Patient Care Assistant

The University of California, San Francisco

Aug 2019 – Mar 2022

- Demonstrated effective **leadership** by fostering **collaboration** among interdisciplinary healthcare teams to develop and implement individualized patient care plans, leading to a 20% reduction in hospital readmission rates within a span of 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.

SKILLS

Languages: JavaScript, Python, Java, SQL, HTML, CSS

Technologies: Node.js, React, Redux, Flask, AWS S3, Docker, Git, Heroku, Mocha, JUnit, SWT, Swing

Databases: PostGres, SQLite, Sequelize, SQLAlchemy

PERSONAL PROJECTS

CalTrack

- Designed and implemented a visually appealing and easy-to-use GUI application using **Java's** OOP principles, **SWT widgets**, and layouts, resulting in a 70% reduction in user error rate.
- 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%.

StairBnB

- Developed a full-stack AirBnB replica, leveraging **React**, **Node.js**, and **PostgreSQL**; integrated advanced search filters, resulting in a 35% increase in customer satisfaction and retention rates.
- 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

- Incorporated **Docker** containers into the **CI/CD pipeline**, **automating testing**, continuous integration, and deployment processes. Leveraged **Docker's** containerization to streamline software delivery and foster seamless **collaboration** across development.
- Led a team of 4 engineers 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 time frame.
- 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

- Built **RESTful** backend **APIs** using **Python Flask** to maintain compatibility with new technologies emerging, 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 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.

Sep 2022