

Khai Phan

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SUMMARY

Software Engineer with hands-on experience with embedded systems and designing, developing, and deploying full-stack software solutions from scratch. Motivated self-starter focused on working with diverse cross-functional teams to build quality cutting-edge new applications and features.

SKILLS

- **Engineering:** Product Roadmap, Frontend & UI/UX, Backend & Infrastructure, Cloud Architecture, API Development & Integration, RESTful Web Services, Microservices, Software Design & Coding, Testing & Code Coverage, CI/CD, DevOps, Software Quality, Scalability, Performance, Reliability, Automation, Cybersecurity, Code Reviews, Documentation
- **Leadership:** Strategic Planning & Execution, Project Management, Prioritization, Process Improvement, Collaboration
- **Software:** Python, C/C++, JavaScript, React, TypeScript, Node.js, HTML/CSS, Flask, SQL, Pytest, Unittest, Git/Github, MongoDB, Kubernetes, Docker, Jenkins, JIRA

EDUCATION

- **Bachelor of Science in Computer Science - GPA: 3.99/4.00, Oregon State University (OSU)** **Expected Winter 2024**
 - Dean's List/Honor Roll2019 - Present

RELEVANT EXPERIENCE

Software Engineering Intern, Garmin

March 2022 - September 2022

- Designed and documented efficient test cases and requirements, resulting in a resolution of 83% of all failing/faulting tests for G2N navigator products through the use of strengthened tests and optimized Python & C macros.
- Constructed fuel buttons and implemented auto-saving and input functionality, enhancing user flows and the overall UX.
- Created new fuel onboard capabilities and flyover waypoints, while diagnosing and fixing issues such as excessive waypoints in flight plans, contributing to improved product performance.

PROJECTS

Alphone-but-better

- Transformed the frontend architecture by replacing Jinja2 with React and collaborated with team members to re-engineer the Flask backend into a robust API, ensuring seamless compatibility with the new frontend design.
- Employed Docker to containerize the project and enhance its maintainability and scalability, encompassing components such as Redis, Stable Diffusion AI image generator, Flask backend, and React frontend.
- Elevated the user experience by implementing threaded and background tasks to generate images, communicating with the app via Redis lists and real-time WebSockets (socket.io) notifications.
- Conducted both manual and automated end-to-end testing using Jest and React Testing Library to guarantee optimal performance and functionality of all components.

Robbing Hood

- Created, developed, and successfully deployed a stock information application that retrieves data from the Finnhub API and displays user-specified stock ticker information, including company profiles, related tickers, analyst recommendation trends, and quotes.
- Implemented user authentication utilizing NextAuth.js, ensuring secure access to user-specific information and web routes.
- Administered and leveraged MongoDB Atlas as a database to manage new credentials, authenticate users, and store per-account stock information.
- Optimized loading and presentation of data through server-side rendering and client-side rendering in Next.js, enhancing the overall user experience.