AMOS LIEW

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SKILLS

Programming: Python, Java, JavaScript, Dart

Technologies: Git, Docker, ReactJS, Flutter, PostgreSQL, Mongo, Redis, Shell, OpenCV

WORK EXPERIENCE

Liminal Insights

Emeryville, CA

Aug 2022 - Aug 2023

Software Engineer Intern

- Implemented multithreaded Python workers, multiprocessing, and Redis task queueing to enable parallelized asynchronous database writes, improving overall data collection throughput by 10%
- Developed internal tools such as automated QA testing scripts and test OPCUA servers using Python, Shell scripting, Docker, and Selenium, increasing overall engineering efficiency by 25%.
- Designed and built frontend features focused on usability for a lab analytics platform using Dash and Flask.
- Increased unit and integration test coverage using PyTest, resulting in a more robust and reliable codebase.

BeeX Singapore

Fullstack Engineer Intern

May 2022 - Jul 2022

- Engineered interactive 3D data visualizations enabling smooth rendering and manipulation of large point clouds in the browser leveraging React and Three.js.
- Optimized search performance through lazy loading, reducing search times by 70%.

Bellos Singapore

Full Stack Developer Intern

Dec 2021 - Jul 2022

- Led end-to-end design and development of reservation management platform used by 10 restaurants.
- Migrated existing backend to a centralized AWS backend with API microservices that utilises RDB.

Kinexcs Singapore

Software Developer Intern

May 2021 - Aug 2021

- Developed data-driven features for mobile app used by over 30 clients using Flutter, Flask, and Python.
- Drove computer vision MVP project with 2 other engineers using OpenCV, Aruco, and MediaPipe.
- Led team of 6 as Software Team Lead to concurrently manage development and release of 2 products.

Personal Projects

Robotic Turtle for Micro-plastic Cleaning | *Devpost*

- Designed 3D model of robotic turtle for environmental sensing using CAD software.
- In a team of 4, rapidly built responsive web app with Firebase, Next.js, and TailwindCSS.
- Produced functioning prototype with Vercel deployment that won "Best Design" in 24 hour hackathon

Gamified Financial Tracker | *GitHub*

- Developed interactive mobile game with Flutter targeting youths with a desire to manage spending.
- Overcame limitations of Flutter flame game engine by manually implementing in-game physics.
- Implemented backend functionality and API integration with Python, Flask framework.
- Awarded the highest level of achievement Artemis, under NUS Independent Software Development Project.

EDUCATION

National University of Singapore

Singapore

Bachelor of Computing (Hon) in Information Systems; GPA: 4.46/5.0

Aug 2020 - May 2024

• **NUS Overseas College:** Completed 1-year NOC Silicon Valley program focused on technopreneurship including a startup internship, courses at Stanford University, and immersion in the SV ecosystem.