

KONSING YUKMAN HAM LOPEZ

Computer Science Graduate with a Focus in Software Engineering

ham.konsing@gmail.com | <https://github.com/Konsing> | (510) 717 - 3507 | Oakland, CA 94607

Education

Bachelor of Science in Computer Science | University of California Davis, Davis CA, Aug. 2022 - June 2024 | *Total GPA: 3.63*

Associate of Science in Mathematics | Berkeley City College, Berkeley, August 2019 - May 2022 | *Total GPA: 3.97*

Technical Skills

Languages & Frameworks: C, C++, Python, Java, HTML/CSS, SQL/SQLite, PostgreSQL, Flask, Django, React, Node JS, C#

Cloud & DevOps & Tools: Google Cloud Platform, Docker, MongoDB, Git/GitHub, Bash/Shell scripting, AWS, Azure

Work Experience

UC Davis September 2023 to Current: **EcoCAR Electric Vehicle ©**

- Automated member processes such as onboarding/offboarding members using Python, Apache Airflow, and Google APIs
- Developed interactive dashboards with Streamlit for real-time task management.
- Integrated Google OAuth2 and Gmail API for automated (secure) communications and event scheduling.
- Deployed solutions on Google Cloud Platform (GCP), receiving significant praise for enhancing various team's efficiency and productivity.

Software Projects

Blog Platform Development (Full Stack)

- Developed a Node.js blog application (Yappin') with Express and Handlebars, using HTML, CSS, and JavaScript.
- Integrated Google OAuth for secure user authentication and utilized AJAX for dynamic content updates.
- Developed features like post creation, editing, deletion, sorting, upvote functionality, and utilized SQLite for storage. Site is similar to Meta's "Threads" app. Dockerized and connected database to the

Artificial Neural Network Model with Website integration

- Developed and trained a TensorFlow and Python-based ANN to pinpoint heart disease risk indicators.
- Created a user-friendly web interface with HTML and CSS for instant health risk assessments from user input.
- Achieved 82.95% accuracy in heart disease prediction through thorough testing and model refinement.
- Managed data collection, cleaning, and preprocessing from the largest heart disease dataset available for research purposes (5 heart datasets combined over 11 common features). Total: 1190 observations.

MS-FAT Variant Development (File System in C)

- Developed a simplified file system in C with comprehensive file read/write operations, managing up to 128 files and 32 open file descriptors simultaneously.
- Designed and managed a virtual disk using 4KB block-based storage, implemented a File Allocation Table (FAT) for tracking up to 65,535 data blocks, and created superblock and root directory structures.
- Ensured robust error handling and optimized performance, reducing disk access time and improving data integrity across all file operations.

Languages

- English (Bilingual) | Spanish (Bilingual)