Andres Mercado
BACKEND SOFTWARE ENGINEER

andresam321@proton.me > 510-695-4124 > [Linkedin](#) > [GitHub](#) > [Portfolio](#) > San Francisco Bay Area CA

Backend Engineer with 2 years of experience designing scalable backend systems. Skilled in Python, SQL, and Flask, with a focus on building RESTful APIs, optimizing relational databases, and deploying backend services. Currently developing *Hey-Compa*, an OCR-powered AI assistant for bill management. Previously developed and deployed *AeroSkyOps*, an aircraft operations platform built with AWS, PostgreSQL, and Docker. Passionate about solving backend challenges and creating high-performance systems.

LANGUAGES: Python, JavaScript, SQL
FRAMEWORKS: Flask (with WTForms), Express
Cloud & DevOps: AWS (EC2, S3), Docker, Nginx

DATABASES: PostgreSQL, SQLite, MongoDB
TOOLS: GitHub, Postman

WORK EXPERIENCE

Hey-Compa (Personal Project) >> *Backend Engineer* > *Remote*   **May 2025 – Current**
    Flask, PostgreSQL, OpenAI API, AWS, Docker, PaddleOCR
- ***Developed a backend system*** for Hey-Compa, an AI-powered OCR assistant that guides underserved users through bill payments.
- ***Integrated PaddleOCR*** to extract billing information (vendor, due date, amount) from uploaded images.
- ***Designed and implemented*** a PostgreSQL schema to store and match bill data to vendor-specific payment instructions.
- **Built modular, RESTful APIs** in Flask to serve real-time guidance, with future upgrades including voice instructions.
- ***Implemented OpenAI's GPT API*** to generate vendor-specific, step-by-step payment instructions from raw OCR output.

Rabbit Aviation >> *Backend Engineer (Project: AeroSkyOps)* > *Remote*   **April 2022 – May 2025** [Live](#)
Independently developed AeroSkyOps, a deployed backend platform built to streamline aircraft ops at a private airport.
    Flask, SQLite, PostgreSQL, AWS, Docker
- ***Replaced an unstructured MongoDB*** setup with PostgreSQL, introducing relational integrity for aircraft assignments, reducing manual errors, and improving database query efficiency.
- ***Developed RESTful APIs*** with Flask and SQLAlchemy to integrate near-live flight tracking and real-time weather updates via the FlightAware API, providing up-to-date aviation insights based on user-input tail numbers.
- ***Utilized AWS (S3 & EC2)*** for scalable data storage, ensuring high availability and system reliability.
- ***Engineered a database-driven*** aircraft parking assignment system that replaced manual tracking in internal testing, dynamically assigning aircraft to parking spots and improving operational efficiency.
- ***Orchestrated Dockerized*** backend services on AWS EC2, integrating Nginx and TLS encryption for secure, high-availability API access.

Real Estate investor >> *Owner* > *Stockton, CA*   **October 2018 – Current**
- **Achieved a six-figure income within** five years by strategically investing in and managing real estate, demonstrating strong market analysis and decision-making skills.
- **Managed a portfolio of properties with 14 tenants**, overseeing property maintenance, tenant relations, and financial management to ensure high occupancy rates and tenant satisfaction.
- **Built and led a reliable team**, coordinating various aspects of property management, from renovations to tenant communications, showcasing leadership and collaboration abilities.

PROJECT EXPERIENCE

WUBER EATS >> *Flask, PostgreSQL, SQLite, WTForms, Render*   [GitHub](#) > [Live](#)
An UberEats clone that allows users to create restaurants, add menus, leave reviews, and manage their shopping cart.
- Designed and implemented RESTful APIs with Flask and PostgreSQL to handle restaurant management, including menu creation, order processing, and user authentication.
- Optimized backend architecture for restaurant management, improving database efficiency for menu updates and seamless cart operations.
- Worked with teammates using WTForms and Render to streamline code integration, improving deployment reliability and team collaboration.

EDUCATION

APP ACADEMY >> Software Engineering   **Completed June 2024**
Coding Dojo >> Python, MERN Stack   **Completed April 2022**