

Andres Mercado

BACKEND SOFTWARE ENGINEER

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Backend Engineer with 2 years of experience designing and deploying scalable backend systems. Proficient in Python, SQL, and Flask, I specialize in building RESTful APIs, optimizing relational databases, and implementing cloud-based solutions. Led the transition of AeroSkyOps from a static system to a fully backend-driven platform, leveraging PostgreSQL, SQLAlchemy, AWS, and Docker to improve data reliability, security, and operational efficiency. Passionate about solving high-performance backend challenges and developing maintainable, scalable architectures.

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

Rabbit Aviation >> Backend Engineer (Project: AeroSkyOps) > Remote

April 2022 – Current [Live](#)

Built AeroSkyOps while working as a Line Service Technician to solve operational inefficiencies.

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.

Rabbit Aviation >> Line Service Technician > San Carlos, CA

September 2017 – August 2023

- **Ensured precise fueling operations** and coordinated logistics for private aircraft while adhering to strict safety protocols.
- **Operated fuel trucks and coordinated** timely fuel distribution, optimizing workflow efficiency within airport operations.
- **Collaborated with team members** to troubleshoot real-time fueling issues, ensuring safe and efficient operations.

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.
- Integrated PostgreSQL and SQLite to enable restaurants to manage menus and receive customer reviews, enhancing user engagement and operational efficiency.
- 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