

Andres Mercado

FULL STACK SOFTWARE ENGINEER

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Full-Stack Software Engineer with 2 years of experience building scalable web applications using Python, Flask, React, and PostgreSQL. Currently developing *Hey-Compa*, an OCR-powered AI assistant that helps users manage and understand bills. Previously developed and deployed *AeroSkyOps*, an aviation management platform built during my time at Rabbit Aviation to streamline aircraft assignments and fuel operations. Skilled in RESTful API development, database optimization, and deploying cloud-based solutions with AWS and Docker. Combines engineering skills with strategic thinking shaped by real estate investing.

LANGUAGES: JavaScript, Python, SQL, HTML, CSS

DATABASES: PostgreSQL, SQLite, MongoDB

FRAMEWORKS: React, Redux, Express, Flask (with WTForms)

TOOLS: GitHub, Postman, Cloudinary

Cloud & DevOps: AWS (EC2, S3), Docker, Nginx

WORK EXPERIENCE

Hey-Compa (Personal Project) >> Full-Stack Engineer > Remote

May 2025 – Current

Flask, PostgreSQL, OpenAI API, PaddleOCR, Docker, React, Redux, Tailwind CSS

- **Built backend for an AI-powered OCR assistant** that extracts vendor, due date, and amount from uploaded documents.
- **Integrated OpenAI's GPT API** to generate dynamic, vendor-specific payment instructions from OCR output.
- **Designed a normalized PostgreSQL schema** linking users, documents, and guidance steps.
- **Secured Flask APIs with CSRF protection** to support OCR submissions, payment guides, and multi-step user workflows.
- **Connected frontend components with Redux** for real-time display of AI-generated steps in a chat-style interface.

Rabbit Aviation >> Full-Stack 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, React, Redux, PostgreSQL, SQLite, AWS, Docker

- **Engineered RESTful APIs with Flask** for flight tracking, fuel management, and authentication, seamlessly integrating them with a React-based UI to ensure smooth data synchronization.
- **Redesigned system architecture by migrating** from a MERN stack to Flask/PostgreSQL, improving API efficiency, frontend scalability, and data integrity in aircraft-to-parking and owner-aircraft relationships.
- **Developed AeroSkyOps**, a Flask-React platform that replaced manual tracking with real-time fuel orders, aircraft assignments, and operational oversight. Used PostgreSQL for data persistence and AWS for cloud deployment.
- **Integrated FlightAware AeroAPI and Weather API with Flask**, delivering real-time airport weather conditions and flight tracking through backend-driven API calls.
- **Deployed the full-stack system on AWS EC2** using Docker, Nginx, and TLS for secure, scalable infrastructure.
- **Designed an interactive aircraft parking assignment system**, allowing employees to dynamically assign, update, and track aircraft parking spots via a React-based UI with a Flask/PostgreSQL backend.

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 properties, demonstrating strong financial acumen and market analysis skills.
- **Managed a real estate portfolio over 6 years**, overseeing tenant relations, financial strategy, and property operations. Developed analytical, problem-solving, and adaptability skills—critical in engineering scalable software solutions.
- **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, React, Redux, PostgreSQL, SQLite, WTForms, Cloudinary, Render

[GitHub](#) > [Live](#)

An UberEats clone that allows users to create restaurants, add menus, leave reviews, and manage their shopping cart.

- **Designed RESTful API endpoints with Flask**, supporting restaurant management, order tracking, and user authentication.
- **Built a responsive frontend with React and Redux**, enabling interactive cart functionality with real-time updates.
- **Optimized PostgreSQL and SQLite databases**, improving query performance and data retrieval efficiency.
- **Configured Cloudinary for optimized image storage**, enhancing page load speeds and UI performance.
- **Integrated Redux and Flask for seamless frontend-backend data synchronization.**
- **Led feature development and deployments in a full-stack team**, ensuring smooth integration with WTForms and Render.

EDUCATION

APP ACADEMY >> Software Engineering

Completed June 2024

Coding Dojo >> Python, MERN Stack

Completed April 2022