

RODRIGO ORTEGA

Texas, USA | ortegarod000@gmail.com | (817) 701-5550 | ortegarodrigo.com

PROFESSIONAL SUMMARY

Full-stack engineer with 5+ years of experience building web and intelligent systems with React/TypeScript, Python/Node.js, RESTful APIs, and PostgreSQL. Recent work includes DroneOS, a ROS2-based drone control platform showcasing independent delivery of production-ready software for autonomous flight, telemetry, and fleet sustainment.

KEY PROJECT

DroneOS - Autonomous Drone Control Platform

2024-2025

<https://aerisrobotics.com>

- Engineered DroneOS, a ROS2-based drone control framework built on PX4 Autopilot enabling autonomous flight behaviors such as arming, offboard control, programmatic missions, real-time telemetry, and BVLOS operations.
- Deployed on a prototype R&D drone with onboard companion computer, achieving programmatic flight and a React/TypeScript mission control interface for telemetry and fleet sustainment.

RELEVANT EXPERIENCE

Full Stack Software & Systems Engineer

2020 - Present

Self-Employed

- Scope, design, and deliver full-stack applications end-to-end, from requirements gathering through deployment and ongoing maintenance.
- Build modern front ends with React, Next.js, and Vue (TypeScript), creating interactive dashboards, forms, and data visualizations tailored to user needs.
- Develop production-ready back ends in FastAPI and Node.js, implementing authentication, database integration, and API architecture for scalable web apps.
- Design and optimize PostgreSQL and SQLite databases, and deploy applications with Docker, CI/CD workflows, and microservices to platforms such as Vercel and Railway.

SELECTED PROJECTS

AI-Powered Document Intelligence Platform

2024

<https://vectorchat.app>

- Built a full-stack web app (React/Python/FastAPI) with a RESTful API integrating vector and SQL databases, enabling a ChatGPT-like interface that provides conversational answers based on user documents.

Ticker Fintel - Market Intelligence Dashboard

2024

<https://tickerfintel.com>

- Developed a web-based platform providing interactive financial dashboards and insights through a modern SvelteKit/TypeScript interface, supported by a Node.js and PostgreSQL back end.

Sports Analytics & News Platform

2024

<https://wosohub.com>

- Developed a FastAPI + PostgreSQL backend with schedulers, workers, and real-time data processing, and delivered the system through a modern Next.js frontend with dashboards and interactive components.

OldSchoolDB - Real-Time In-Game Market Data

2024

<https://oldschooldb.com>

- Built a full-stack web app with a Node.js/Express.js RESTful API (70+ endpoints) on a PostgreSQL/Redis backend, paired with a React/TypeScript dashboard managing 4,000+ items with real-time and historical price tracking, powered by automated 60-second API updates with robust error handling.

Venue Booking and Contract Management System

2023 - Present

<https://ranchoencanto.com>

- Built a full-stack web application with a PostgreSQL backend, designing scalable data models for clients, contracts, bookings, and invoices, enabling CRM, scheduling, and financial tracking in a unified planning platform.

EDUCATION

The University of Texas at Austin, Austin, TX
Bachelor of Business Administration, Finance

2013

INTERESTS

Autonomous Systems, Robotics, AI/ML, Software Engineering, Real Estate, DIY, Sports & Fitness, Music Production