

Ryan Stoffel

Corona, California, USA

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Education

California Baptist University - ABET Accredited

Bachelors of Science in Computer Science, AI/ML Concentration

Sep. 2023 - May. 2027

Riverside, CA

Technical Skills

Languages: Java, Python, C#, C++, SQL, TypeScript, JavaScript

Backend & Frameworks: .NET, WPF, Spring Boot, REST APIs, WebSockets, Node.js

Systems & Infrastructure: Linux, NixOS, Docker, GCP (Cloud Run, Cloud Functions), Git, GitHub

Data & AI: PostgreSQL, pgvector, Firestore, RAG pipelines, LLM agent integration

Web: React, React Native, Next.js, HTML, CSS

Work Experience

Software Engineer Intern

Jun. 2026 - Aug. 2026

Naval Surface Warfare Center (NSWC), Corona Division

Norco, CA

- Shipped an AI operations assistant integrated into a naval range scoring platform's WPF/.NET desktop application in a DoD environment; owned full-lifecycle design, implementation, testing, and documentation within Agile sprint cycles.
- Enabled the assistant to control range hardware from natural-language chat via a C# WebSocket command relay that reuses the application's own execution paths, with human approval gates on disruptive actions, verified on live hardware.
- Engineered a self-configuring NixOS gateway VM booting a Dockerized agent stack with a PostgreSQL memory store, plus an offline, air-gapped installer enabling zero-touch deployment to network-isolated sites.
- Built agent capabilities for read-only database access over sqlcmd, network switch discovery, and templated PDF report generation, plus a self-reflection loop that stores lessons in a vector memory store behind an approval gate.

Software Engineer Research Assistant

May. 2025 - Apr. 2026

CAiMLL (CBU Ai & Machine Learning Lab)

Riverside, CA

- Laid the schema groundwork for a production Salesforce system now managing 35,000+ records, modeling 10+ custom objects alongside a 10-person engineering team.
- Built a Python data pipeline that extracts Salesforce records and loads them into GCP to feed the recommendation engine, powering 5,000+ match results as part of a 4-person integration team.
- Reduced enterprise recommendation latency from 60s to 3s (95% improvement) by architecting the DINA Matching Engine, pairing a Python data pipeline with pgvector similarity search in PostgreSQL on GCP.

Projects

Ember - Senior Capstone Project - (In Progress)

Apr. 2026 - Present

Python, Neo4j AuraDB, MCP, GitHub Webhooks, Jira REST API

- Designing an open source system with a 5-person team that builds a typed knowledge graph of a software team's decisions, tickets, and pull requests from GitHub, Jira, and Slack, and serves it to AI coding agents through an MCP server.
- Built a benchmark harness comparing six retrieval strategies on a synthetic corpus and SWE-Bench Verified Django tasks; graph retrieval matched embedding search accuracy with 35-45% fewer response tokens.

Formula Fly - Machine & Deep Learning Research Project (In Progress)

Sep. 2026 - Present

Python, PyTorch, MuJoCo, NumPy, flyvis

- Building a simulated race car driver controlled by a fruit fly connectome model, training on a MuJoCo Silverstone practice track with a planned demo in Assetto Corsa.
- Implemented the camera frame to steer, throttle, and brake interface, a 96x96 head camera with hexagonal resampling into a frozen flyvis optic lobe model, and a closed driving loop with CI; PPO training is the next milestone.

Parallax - (In Progress)

Sep. 2026 - Present

Rust, TypeScript, Electron, Claude Code, Codex, GitHub Actions, Linear

- Building an open source desktop app with an Electron client and a Rust host daemon that runs Claude Code, Codex, and Cursor agents on local or SSH-connected machines, where a coordinator chat delegates work to subagents in isolated git worktrees.
- Directing an AI-powered workflow where a project manager agent plans Linear issues and delegates them to engineer, QA, and DevOps subagents, with a separate reviewer agent gating every PR across 440+ commits and cross-platform CI/CD on macOS, Windows, and Linux.

SnapDose - Junior Design Project (Team Lead)

Jan. 2026 - Apr. 2026

Java Spring Boot, React Native, GCP, M5Stack Tab5 (ESP32-P4)

- Led a 5-person team building a full-stack Type 1 Diabetes management app, architecting a Java Spring Boot REST API deployed on GCP Cloud Run with Firestore persistence behind a React Native client.
- Connected the app to an M5Stack Tab5 (ESP32-P4) insulin pump simulator, delivering bolus commands over WiFi through the API, and integrated the Dexcom CGM API for real-time glucose data.