



# Ryan Zernach Senior AI Software Engineer (Full-Stack)

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## HIGHLIGHTS

- Strategic infrastructure engineer with 10+ years of experience in Mobile Apps, Agents, MLOps, DevOps, and Cloud
- Shipped front-end & back-end of CellarChat™ chatbot to 1M+ members and established LLM evaluation pipelines
- Architected distributed systems for eCommerce platform, powered by agentic VOIP outbound AI / LLM phone calls
- Boosted mobile app ratings to 4.9★ (10k+ reviews) & lifted recurring revenue by 25%+ w/ Apple Pay subscriptions
- Awarded Top 10 of 10,000 international projects in the 2024 NASA Space Apps hackathon with AI Voice Assistant

## TECH STACK

- LLMops / RAG / MCP / Voice Agents / Evaluations
- LangChain / GenAI / OpenAPI / Semantic Kernel
- Machine Learning Pipelines / Computer Vision
- Python / PyTorch / PySpark / ETL / TensorFlow
- Cloudflare / AWS / Azure / GCP / CloudOps
- DevOps / Docker / Kubernetes / Terraform
- Vector Databases / SQL / GraphQL / NoSQL
- Git / Bash / Cursor / Claude / Orchestration
- AuthN / AuthZ / OAuth / Identity / Security
- React Native / iOS / Android / Swift / Kotlin / Expo
- TypeScript / React / Redux / Node / Next / Streamlit
- WebSockets / Queues / RabbitMQ / Redis / WebRTC
- FastAPI / Express / Rust / .NET / C# / Go / Java / Ruby
- Blockchain / dApps / Wallets / Ethereum / Solana
- Apple Pay / Subscriptions / Stripe / IAP / Webhooks
- SEO / Marketing Automations / Campaign Attribution
- IMAP / SMTP / Emails / SMS / Twilio / Push Notifications
- Systems Observability / Analytics / Admin Dashboards

## CERTIFICATIONS

- **2025:** Gauntlet AI Engineering Fellowship (G3)
- **2024:** NASA Space Apps Hackathon Winner
- **2023:** GenAI with Large Language Models
- **2022:** Ethereum Blockchain Developer
- **2021:** Mosh React Native Academy
- **2020:** Machine Learning Pipelines (DataRobot)
- **2020:** TensorFlow Computer Vision Developer
- **2019:** Google Cloud Platform GCP Developer
- **2019:** AWS Microservices Practitioner
- **2019:** Y Combinator Startup School

## EXPERIENCE

### AI Engineer & Mobile Engineer (Full-Stack) • CellarTracker • Remote • Seattle

2023 - 2025

- Wrote CellarChat™ LLM chatbot for 1M+ active members using TypeScript front-end & Python back-end
- Architected OpenAPI tool-calling pipeline, fine-tuning pipeline, LLM evaluations, & observability systems
- Integrated intelligent ML-powered recommendations for world's largest online database of wine reviews
- Helped to boost app store ratings to 4.9★ average with 10,000+ verified 5-star ratings on iOS and Android
- Embedded Apple Pay subscriptions in the React Native app to generate additional 25%+ recurring revenue
- Implemented animations, barcode scanning, activity feed posts, ML recommendations, & OCR image search
- Streamlined the Redux store for fast, efficient, and persistent global state management between app sessions
- Rebuilt the React Native app's analytics implementations for tracking critical user interactions and app behavior

### Mobile Engineer • Demosphere • Remote • Washington D.C.

2022 - 2023

- Transitioned entire codebase from Javascript to Typescript for increased long-term maintainability
- Implemented updates to front-end React Native according to the design team's mockups in Figma
- Improved computational and network efficiencies by reducing load times and runs to the database
- Evaluated Google Crashlytics to reduce edge case crashes and improve p95 stability and performance
- Iterated on group chat features, push notifications, and native calendar sync to improve user satisfaction

**React Native Engineer (Full-Stack) • FinEquities • Remote • Miami****2021 – 2022**

- Built fintech app to compete with Robinhood by exchanging stocks/crypto & connecting bank accounts
- Wrote the data-visualization logic for viewing and comparing the performance of different stocks/crypto
- Built social network features, such as direct chat, user profiles, posts, likes, emojis, & threaded comments
- Constructed core mobile app functionality, including: copy portfolio, trending investors, & suggested stocks
- Custom-built a companion admin web dashboard to monitor mobile app performance & infrastructure health

**Data Science Tutor & Teaching Assistant • edX • Vanderbilt University, UC Berkeley, +24 others****2020 – 2021**

- During pandemic, taught 900+ online college students Python, machine learning, TypeScript, websites, & databases
- Managed busy schedule of remotely teaching 30+ university students per week in 1:1 setting (one hour per person)

**React Web Developer (Full-Stack) • Georgia Hybrid Landscaping • Atlanta, Georgia****2015 – 2019**

- Converted PHP websites to React and marketed businesses to generate \$500k+ of gross sales in 3 years
- Engineered user experience of uploading videos/images, survey questions, & receiving PDF pricing proposal
- Managed online presence for small businesses, including web analytics, Google AdSpend, & email campaigns

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## EDUCATION

**Computer Science & Mathematics • Georgia Southern University • Statesboro, GA****2011 – 2012**

- Visual Basic, Calculus, C, C++, R, Statistics, Data Structures, Programming Principles, Linear Regression

**Data Science Software Bootcamp • Lambda School • Y Combinator • Remote****2019 – 2020**

- Deployed Supervised/Unsupervised Machine Learning Models, Recommendation Engines
- Computer Vision (CV) Models, Time-Series Forecasting, Natural-Language Processing (NLP) Pipelines
- Python, SciKit-Learn, PySpark, Data Engineering, PostgreSQL Databases, Back-End APIs (Flask / FastAPI)

**AI Engineering Fellowship (G3) • Gauntlet AI • Remote • Austin, TX****Fall 2025**

- Invested 10 weeks and 100 hours per week into intense curriculum of AI engineering techniques
- Harnessed the power of RAG, multi-agent systems, OpenAPI, and MCP to build agentic automations
- Mastered how to command agents, automate workflows, & deliver enterprise-grade software solutions

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## PERSONAL PROJECTS

**Founding Full-Stack Engineer • Archlife Industries Software • Remote**

- New users sign up everyday for the apps that I've created to solve my personal problems
- Setup custom observability dashboards for marketing, analytics, API logs, & database admin
- Deployed agentic experiences to facilitate purchasing products with AI outbound phone calls
- Automated LLMs to advertise on Reddit by reading threads and commenting on the best posts
- Built end-to-end MLOps pipelines to enable low-latency inference and continuous model updates
- Productionized chatbots using RAG, agentic tool-calling, voice-powered commands, & interactive maps

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**Thank you for reviewing my resume!**  
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