

riley@yelir.me · yelir.me · linkedin.com/in/rileybrennan · Palo Alto, CA

Software engineer and tech lead with a background in math and statistics. For the last few years I've been building LLM-powered tools for financial-crimes investigations at Robinhood, and leading the cross-team projects that get them into production. Pulled toward the general solution over the one-off fix, and toward leaving the people around me faster and better-equipped than I found them.

Experience

Robinhood Markets Software Engineer & Tech Lead

March 2022 to Present

Financial Crimes Engineering: LLM tooling for investigations and the cross-team work that ships it.

- Built greenfield **LLM pipelines** for adverse-media research and fraud-typology classification, saving on the order of 1,000 investigator-hours a month.
- Built and shipped a fleet of **autonomous coding agents** the team uses day to day, contributing roughly a 25% lift in team velocity.
- Led the in-house rebuild of regulatory filing as the team deprecated its **Actimize** vendor stack, shipping SAR filing to **FinCEN** and STR filing to Canada's **FINTRAC**.
- Designed and led the team behind a **self-serve detection platform**, cutting detection latency from over 24 hours to under 30 minutes.
- Drove the simultaneous, incident-free launch of **EU crypto and UK brokerage**, owning the internationalisation of the crypto and sanctions screening systems that made it possible.
- Led a team of L4 engineers building the unified **alert-management platform** that became the backbone for the rest of FinCrimes.

Google Software Engineer & Tech Lead

January 2020 to March 2022

Tech lead for inventory and warehouse control systems in the Technical Infrastructure organisation.

- Led four engineers and fifteen support engineers running the inventory system through Google's company-wide **ERP migration from Oracle to SAP**, coordinating changes across many integration points at once.

Bravo Reporting Systems Lead Software Engineer

January 2015 to October 2025

A startup that ran a SaaS app for activity-report generation, through to its closure in October 2025.

- Mentored new hires, getting them up to speed on feature work and refactors and giving them a real path into a software-engineering career.
- Cut page load times by **90%** by reworking the database architecture and query logic.
- Built and maintained a multi-stage **CI/CD pipeline** from scratch for fast, safe releases.

SPS Commerce Senior Software Engineer

April 2016 to August 2019

A B2B SaaS company building supply-chain integration frameworks across retail, eCommerce, and fulfilment systems.

- Designed and built **containerised web apps** for document translation.
- Built integrations into ERP and storefront systems including Salesforce, NetSuite, and Magento.
- Used **AWS API Gateway and Lambda** to migrate a monolith to a microservice architecture.

Education

University of Minnesota Mathematics major, Computer Science minor

August 2010 to May 2014

Minneapolis, MN.

University of Oxford Semester abroad

Spring 2014

Oxford, UK. Thesis: mathematically modelling traffic flow. Also studied English scientific and military history.

Society of Actuaries Examinations

Competencies

AI & LLMs LLM pipelines · prompt engineering · agentic workflows · model evaluation · retrieval & summarisation · AI developer tooling

Languages Go · Python · TypeScript · Java · PHP · SQL/PostgreSQL

Infrastructure AWS · Kubernetes · Docker · serverless · gRPC · Kafka · Airflow · Spark · CI/CD · Protocol Buffers

Leadership & craft Technical leadership · cross-team delivery · architecture & design docs · code review & standards · mentorship · observability & tracing