

MITCHELL IRVIN

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EXPERIENCE

Google, LLC

Senior Software Engineer

Mar '26 – Present

AI Mode – C++, Gemini, Python

- Led a team of 5 SWEs; architected a scalable evaluation pipeline to measure the response quality of live event queries for high stakes, real-time verticals (Sports, Elections, Crisis), pioneering freshness metrics and reducing latency from >24h to ~60min
- Drove strategic alignment on live events across DeepMind, Search Verticals, and Evals to enable replaying of live event queries and provide well-lit onboarding paths for global product launches
- Led a team of 4 SWEs; improved helpfulness (+16%) and factuality (+6%) of AI Mode responses for sports queries via prompt engineering and RAG

Software Engineer III

Jun '22 – Feb '26

Search, Jobs – C++, Java, JavaScript

- Led a team of 3 SWEs; migrated the Jobs corpus to a new data model; reducing storage footprint by ~72% and saving ~\$1.4m in compute costs annually
- Owned the live migration of Saved Jobs to a new data model and UI, reducing critical path latency by ~30%

Palantir Technologies, Inc.

Software Engineer

Apr '20 – Jun '22

"Swing" – Electron, Gotham, React, Redux, TypeScript

- Designed and coded a data-backed collaborative briefing API, optimized for narrow hardware reqs
- Scoped, designed, and built a data-driven actions API for inter-process communication (message passing)
- Designed and implemented a drag-and-drop API to empower cross-app workflows in the workspace
- Conducted 100+ engineering interviews, contributed to global hiring standards
- Coauthored the internal guidelines on software testing

Forward Deployed Engineer

Jan '19 – Apr '20

"Seven" – Elasticsearch, Foundry, Java, PySpark

- Led the design and implementation of several Java APIs, critical to fulfilling a \$15m contract
- Built a pipeline in PySpark to ingest, clean, and transform ~20TB of data

Software Engineer

The Home Depot, Inc.

Feb '17 – Dec '18

Finance API – Spring, Google Cloud Platform

- Developed three backend services as part of an event-driven, microservice architecture to manage financial data

TIMS – AngularJS, Spring, Pivotal Cloud Foundry

- Led a team of five in building a full-stack app to manage over \$10b in inventory annually

Internship Program – Mentor, Instructor

- Mentored a group of 10 interns. Designed and taught a weekly coding workshop

SKILLS

Languages

C++, Java, JavaScript, Python, TypeScript

Frameworks/Libraries/Technologies

Abseil, Enzyme, Jest, JUnit, Mockito, Node.js, pytest, React, React Testing Library, Redux, Spring

PROJECTS

NeetCode

Maintainer, open-source solutions for neetcode.io

PagerDuty Events V2

Open-source Java client for PagerDuty Events V2 API

INTERESTS + PROJECTS

Competitive Coding

Ranked in the 96th percentile on hackerrank.com

The Philosophy of Software Development

Recent reads: "Designing Data Intensive Applications", "Clean Code", "Design Patterns", "A Philosophy of Software Design"

Hobbies

So many. Craft coffee/tea, olympic weightlifting, woodworking, personal finance, DIY car/house repair, tennis, snowboarding, philosophy.

EDUCATION

B.S. Computer Engineering

University of Florida

Cum Laude