Education

University of Pittsburgh, Honors College

B.S. Computer Science

Relevant Coursework: Data Structures & Algorithms, Deep Learning, Operating Systems, Distributed Systems, Computer Organization & Systems Software, Computer Networking, Web Development, Linear Algebra, Graph Theory, Statistics

Work Experience

Applied Intuition | Software Engineer

- Founding engineer on the applied ML team, researching and building AI solutions for automotive (Python, ML) Lead engineer building intelligent autonomous vehicle data search & annotation at scale using open-vocabulary
- perception models & full-text search (Python, Golang, Spark, Triton, Kubernetes, AWS, CLIP, OpenSearch)
- Created an <u>LLM-based assistant</u> used by all major customers for Q&A and to generate simulation scenarios with less manual effort; established workflows for iteratively improving production LLM systems (Python, Postgres, LLMs, RAG)
- Built infrastructure for real-time and batch ML & LLM inference in production; used GPU auto-scaling to reduce cost & model serialization to improve latency; evaluated open source LLMs for internal use (AWS, Kubernetes, Triton, vLLM)
- Identified and resolved on-call issues in a complex production environment (Kubernetes, AWS)

Semiotic Labs | Software Engineering Intern

 Created a novel testing framework using fuzzing & auto-differentiation to ensure the accuracy & numerical stability of manually implemented derivative functions for the core Odos order-routing algorithm (C++, Fuzzing, Python, Docker)

Two Sigma | Software Engineering Intern

- Designed and implemented real-time resource usage tracking for large Kubernetes compute clusters (Go, Kubernetes)
- Refactored legacy compute cluster cost-tracking software; fixed legacy bugs that misattributed hundreds of thousands of dollars in compute spend

Semiotic Labs | Research Intern

- Led research with <u>The Graph Protocol</u> to predict GraphQL query costs using transformer models; Managed project scope and direction; communicated progress to stakeholders via bi-weekly presentations (Python, PyTorch, Kubernetes, Docker)
- Built a parallelized synthetic data generation pipeline and multi-GPU training infrastructure to quickly iterate on datasets and models

Aurora Innovation | Software Engineering Intern

- Developed new collaboration features for the high-definition map data visualizer, improving inter-team productivity (Go, TypeScript, gRPC, React, Redux, AWS, Kubernetes)
- Optimized the map database structure & indexing strategy to significantly reduce page loading times (Python, Postgres)
- Migrated legacy application functionality to a microservices architecture (Python, Go, Postgres, AWS)

Google | Software Engineering Intern

 Developed a web-based debugging tool for Google's experimentation framework, resulting in increased productivity for over 1000 Google engineers; completed the project 5 weeks ahead of schedule (Java, TypeScript)

Google | STEP Intern

• Worked in a 3-intern team to design, develop, and deploy a mentorship web application for first-time contributors to open source (Java, JavaScript, React, GCP)

Timberlane | Software Engineering Intern

Developed a web-based product configuration software to expand user customization & streamline ordering (Python)

Projects / Leadership

VaccinatePA | Co-Founder

- Co-founded a nonprofit website to help people find COVID-19 vaccines in PA: VaccinatePA.org
- Scaled the website from 0 to 450,000 users in three months with zero budget (TypeScript, Python, React, Next.js)
- Built a team of 200+ volunteers to crowdsource vaccine availability data; interviewed with 20+ news stations

Richie Goulazian

linkedin.com/in/rgoulazian

August 2019 - April 2023

GPA: 4.0/4.0

github.com/Richie78321

Mountain View, CA | June 2023 - Present

New York, NY | May 2022 - August 2022

Los Altos, CA | January 2022 – May 2022

Los Altos, CA | November 2022 - May 2023

Pittsburgh, PA | September 2021 - December 2021

New York, NY (Remote) | May 2021 – August 2021

Sunnyvale, CA (Remote) | May 2020 - August 2020

Montgomeryville, PA | March - August 2019

January 2021 - July 2021

