

EDUCATION

- **University of Waterloo** Waterloo, Canada
Bachelor of Mathematics, Majoring in Statistics & Double Major in Psychology; GPA: 3.9 Sept. 2011 – May 2016

EXPERIENCE

- **Scale AI** San Francisco, CA
Software Engineer, Contributor Experience May 2024 - Present
 - **Model Playground:** Led, designed, and implemented *Model Playground*. Playground is an app like ChatGPT, exposing models from all providers, including private endpoints that Scale customers want to test in the wild. Only available for Outlier contributors, under NDA. Ramped to 70k WAU, generates 10k conversations daily that power internal and external research teams.
 - **Task Marketplace:** Along with other tech leads, designed and implemented *Marketplace*. Marketplace allows contributors to choose their own projects instead of being allocated projects by operators. Increased contributor hours on platform by 57%, shifted NPS on Outlier from 30 to 44.
- **DevMark (YC S23)** San Francisco, CA
Co-founder July 2023 - Feb 2024
 - **Startup Launch and Growth:** Part of YC (S23), launched an AI-powered marketing agency specializing in DevTool companies. Acquired 8 clients and managed \$25,000 in marketing budget within two months of launch.
- **Elements.io and Circle** Remote
Staff Software Engineer via acquisition of Elements.io Jan 2022 - Aug 2023
 - **Payments Engineering, USDC:** Elements.io was started by my manager at Lime. I joined, and it was soon acquired by Circle. At Circle, I was the tech lead for the fiat teams (around 10 engineers). Orchestrated over \$50B in USDC mints and burns with perfect accuracy. Integrated 6 banking partners, two PSPs, and handled diverse payment rails including wires, SEPA, RTP, SPEI, and ACH. Successfully navigated Silvergate and SVB meltdowns.
- **Lime Scooters** San Francisco, CA
Tech Lead, Senior Software Engineer 2019-2022
 - **Data Infrastructure:** Tech lead for 7 engineers on the data engineering team. Built Lime's data platform (orchestration, compute, warehouse) from 0-1. Empowered self-serve for users across the company, 10x'ing analysts and data science iteration speed. Technologies used: AWS, Airflow, Spark, Snowflake, Delta Lake.
 - **Stream Processing:** Designed and implemented highly available, low-latency stream processing services using Flink to parse 300k+ EPS scooter events. Also developed and maintained CDC services that enabled data replication from MySQL to Snowflake and Delta Lake.
 - **Resource Planning:** Executed compute resource planning and budgeting strategies for multi-year budgets. When Lime's data volume grew by 5x, proposed and led projects to reduce costs, saving \$1M+ annually, including:
 1. Reducing the runtime of ETL pipelines by 80% by switching to incremental calculations.
 2. Rearchitecting the data execution platform; migrating heavy compute to Spark and Delta Lake.
- **Two Sigma, via Crux Informatics** San Francisco, CA
Data Engineer 2018-2019
 - **Hedge Fund Data Platform:** Developed and operated 2,500+ data pipelines for Two Sigma, averaging 7 pipelines per day. Built tooling and infrastructure for generating data pipelines at scale. Technologies used: Airflow, Spark, GCP.

PROGRAMMING

- **Languages:** TypeScript, Python, Ruby, Go, Java, SQL
- **Technologies & Tools:** AWS, GCP, Docker, Kubernetes, Terraform, Airflow, Snowflake, Fivetran, Debezium, Kinesis, MongoDB, PostgreSQL, MySQL, Spark, HDFS, ZooKeeper, Flink, Protobuf, Avro, gRPC, Hadoop, Next.js, LLMs (Large Language Models), Inference, SSE, WebSockets, RTP, SEPA, Google Pay, Apple Pay, PSPs