

ERIC LI

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Education

University of Waterloo

Honors Bachelor of Mathematics & Computer Science

Combinatorics & Optimization Minor, Computational Mathematics Minor

September 2018 – April 2023

Waterloo, ON

GPA: 3.9, Dean's Honor List

Technical Skills

Languages: Python, Go, C++, Java, JavaScript, TypeScript, SQL

Frameworks: PyTorch, NumPy, Pandas, scikit-learn

Tools: AWS, GCP, Snowflake, BigQuery, Git, Terraform, Linux, Bash, Docker, Kubernetes, MySQL, MongoDB, PostgreSQL

Experience

IMC Trading, LLC

Incoming Quantitative Trader

Present

Chicago, IL

Observe, Inc

Compiler Engineer

August 2022 – Present

Remote

- Developed features in Go for a declarative functional query language compiler; lexing, parsing and language design.

Akuna Capital, LLC

Quantitative Trading Intern

June 2022 – August 2022

Chicago, IL

- Built Python FastAPI microservice and a Grafana dashboard to serve crypto risk data and margin exposure to traders.
- Research and apply quantitative methods to predict volatility movement in the S&P index options markets.
- Develop tools and scripts to analyze delta one strategy backtesting results.

Google, LLC

Software Engineering Intern

January 2022 - April 2022

Seattle, WA

- Built cache layer for [gcsfuse](#), an open source user-space virtual file system for Google Cloud Storage written in Go.
- Improved multithreaded file I/O throughput performance by up to 900% for machine learning model training at scale.

Observe, Inc

Software Engineering Intern (Compiler)

August 2021 – December 2021

San Mateo, CA

- Designed several key features for a query language compiler written in Go to improve expressiveness, performance and user experience; reduced input query sizes by an average of 50%.
- Created a transpiler and a metrics query translator for domain specific query languages using lexical parsing and Regex.

Cloudflare, Inc

Data Engineer Intern

May 2021 – July 2021

Austin, TX

- Built data ingestion ETL pipelines in Spark and Scala to collect analytics data in GCS buckets and BigQuery.
- Optimized Kafka ingestion service written in Go by implementing batched stream processing and converting ingested data to Parquet file format; reduced cloud storage usage by 88% and cloud compute costs by 80%.

Lacework, Inc

Software Engineer Intern

May 2020 – November 2020

San Jose, CA

- Implemented relational SQL database query optimizations and queuing microservice in Java saving \$1.5M+ per year.
- Designed queue persistence for a distributed job scheduler in Go to support horizontal scaling and metrics collection.
- Created a distributed data loader microservice in Java to pipeline data from AWS S3 to Snowflake, increasing data throughput by more than 250%.

Hyperdoc, Inc

Founder, Y Combinator W20

January 2020 – April 2020

Sunnyvale, CA

- Founded a Y Combinator backed developer tool startup that helps software teams and open source project contributors create better documentation and onboarding materials.

Lacework, Inc

Software Engineer Intern

September 2019 – December 2019

Mountain View, CA

- Created an extensible testing harness in Java to schedule and run tests for data pipeline microservices, utilizing Docker and Kubernetes; reduced engineering time spent on pipeline testing by 50%.