

Feiyang Lin

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Education

University of Waterloo

Bachelors of Software Engineering, 3.9 / 4.0 GPA

Waterloo, Ontario

2020 - Present

Skills

Languages

C++, Python, Go, SQL, Scala, Java, JavaScript, Kotlin, PHP

Technologies

Docker, Spark, Airflow, Grafana, MongoDB, Express, React, Flask, Node.js

Work Experience

Software Engineering Intern

Toronto, Ontario

FilSwan

May 2023 - Aug 2023

- Backend development of a decentralized cloud computing platform used for the storage, sharing, and deployment of code and software applications
- Designed and deployed Flask server APIs for the creation, assignment, and monitoring of computing tasks distributed to groups of computing providers
- Optimized file download speeds in Python using concurrency to download files in parallel, reducing download times for large numbers of files by over 3x
- Integrated region and hardware filters for a task matching engine to efficiently allocate computing tasks to providers that best fit task requirements
- Integrated a web3 payments system, leveraging blockchain technology, to allow for transparent and tamper proof user payments and computing provider payouts

Software Engineer Co-op

Toronto, Ontario

Index Exchange

Sep 2022 - Dec 2022

- Development of microservices and data pipelines to process the financial data of a programmatic advertising platform that handles billions of requests everyday
- Added request sampling in Go to collect advertisement data from millions of outgoing auction requests every day
- Enhanced ETL jobs with Scala, Spark, and SQL to increase daily pipeline throughput by 25,000 new database records
- Implemented Jira ticket type validation to CICD pipelines to ensure accurate issue tracking for pull requests

Data Scientist

Toronto, Ontario

Wish

Jan 2022 - Apr 2022

- Completed analysis, data engineering, and machine learning tasks to drive data driven decisions on an e-commerce platform with millions of monthly users and products
- Introduced machine learning models that estimated product profits and similarity based on key product traits allowing for greater analysis into user spending patterns
- Designed, implemented, and deployed an automated reporting job for package delivery metrics using Python, SQL, and Airflow, reducing the manual workload for dozens of core business teams
- Created Airflow data pipelines using Spark, Presto, and Hive to efficiently build and populate database tables with millions of records

Software Developer

Calgary, Alberta

Exempt Edge

May 2021 - Aug 2021

- Full-stack software development on the LAMP (Linux, Apache, MySQL, PHP) stack to create software solutions for the private capital markets of Canada
- Introduced new investor referral system built with PHP and Laravel to replace and expand upon the previous method used by over 90,000 transactions
- Refactored and optimized SQL queries in combination with utilizing hash tables to reduce end user latency by 2.5x

Projects

Yum

3rd Place winner of the Cisco Webex Virtual Hackathon

- Full stack web application built with MongoDB, Express, React, and Node.js that helped users make food donations
- Developed server APIs in Node.js to handle essential CRUD operations
- Created frontend components for the listings page in React to display and allow users to interact with posts