

Fei Lin

✉ f34lin@uwaterloo.ca | 🐙 github.com/Flin42 | 🔗 linkedin.com/in/feilin/

Education

University of Waterloo

2020 - 2025

Bachelors of Software Engineering

90.1% CGPA

Courses: Algorithms, Data Structures, Databases, Operating Systems, Concurrency, Networks, User Interfaces

Skills

Languages

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

Technologies

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

Experience

Software Engineering Intern (Incoming)

Toronto, Ontario

Intact Financial Corporation

Jan 2024 - Apr 2024

- Design and development of backend solutions for Intact's artificial intelligence teams

Software Engineering Intern

Toronto, Ontario

Swan Cloud Inc. (FilSwan)

May 2023 - Aug 2023

- Implemented Flask server APIs for the creation, assignment, and monitoring of computing tasks distributed to groups of computing providers
- Optimized download speeds for large batches of files in Python by downloading files in parallel, reducing download times for large numbers of files by over 3x
- Added filters for a task matching engine to efficiently allocate computing tasks to providers that best fit task requirements
- Integrated blockchain payments to allow for transparent and tamper proof user payments and computing provider payouts

Software Engineering Intern

Toronto, Ontario

Index Exchange

Sep 2022 - Dec 2022

- Development of data pipelines to process the financial data of Index's programmatic advertising platform
- Added request sampling in Go to collect daily advertisement data from millions of outgoing auction API requests
- Enhanced ETL jobs with Scala, Spark, and SQL to increase daily pipeline throughput by 25,000 new database records

Data Scientist

Toronto, Ontario

Wish

Jan 2022 - Apr 2022

- Wrote an automated reporting job for package delivery metrics using Python, SQL, and Airflow, replacing the manual workflows for dozens of business teams
- Introduced machine learning models that estimated product profits and similarity based on key product traits allowing for greater analysis into user spending patterns
- 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

- 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