Felix Liao

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Skills

Languages: Java, Python, C++, C, TypeScript, JavaScript, SQL, Dart, R, Kotlin

Technologies and Tools: React, AWS, NodeJS, PySpark, Snowflake, Docker, Flask, Postgres, Flask, Flutter, Git, Bash

Education

University of Waterloo - Bachelor of Computer Science — April 2025

Courses: Data Structures and Algorithms, Operating Systems, Artificial Intelligence, Networks, Distributed Systems, Calculus

Experience

Software Developer Intern - OpenText — September 2024– present

Python, Java, SQL, Selenium, TestNG, Jenkins — *Waterloo, ON*

- Developed Python ETL validation tools for data transfer accuracy from staging to data warehouses
- Built reusable automation tools using Java, Selenium, and TestNG as part of an improved CI/CD pipeline

Software Developer Intern - Intact — January – April 2024

Java, Python, PySpark, SQL, Databricks, Snowflake, AWS, Jenkins — *Toronto, ON*

- Built data manipulation tools in Java generating synthetic data, enabling teams to enhance insurance pricing models
- Redesigned modular Databricks workflows by implementing stepwise workflow caching using S3, allowing selective task re-execution and saving teams 2+ hours of manual work per job run
- Implemented insurance pricing models and business logic into Java classes and collaborated with stakeholders and data scientists to build insurance policy aging simulations, increasing model accuracy by 38%
- Developed 3+ ETL tools for Snowflake and S3, reducing data conversion steps and boosting efficiency by 25%

Software Developer Intern - Flitex — August – December 2023

TypeScript, ReactJS, Python, SQL, Flask, Docker, AWS — *Toronto, ON*

- Built 3 views to visualize flight simulations and airport data from 70+ airlines in a full-stack web app, creating 5 interactive features to enhance data exploration and user engagement with TypeScript, React, and Python
- Deployed models that used live flight data to forecast airport congestion using Python, Flask, AWS Lambda functions, and Docker containers on EC2
- Optimized load times by 1200+ ms by storing cold data on S3 and real-time data parsed by Apache Camel into Postgres

Software Developer Intern - BluRoot — January – April 2023

TypeScript, JavaScript, Redux, ReactJS, Python — *Toronto, ON*

- Designed and implemented a complete CRM app with 6 demanded features, including insurance policy management, document storage, and automated workflows acquiring 30+ clients upon release
- Revamped React architecture with Redux state machines and Flux pattern, cutting API calls and render time by 900+ ms
- Engineered a scalable application architecture adopted for all future CRM apps and extensions using the state and observer design pattern, streamlining the code base by 33%

Full Stack Developer Intern - WSIB Innovation Lab — May – August 2022

Dart, JavaScript, Python, Flutter, FireBase, MongoDB — *Waterloo, ON*

- Developed a Flutter-based insurance claims app to digitalize submissions and validation, enhancing efficiency by 75%
- Spearheaded the planning and implementation of features such as navigation, animations, UX, and the connection to the backend REST API which used databases such as Firebase and MongoDB
- Optimized the code base using object-oriented design and a state machine to cache information, reducing API calls, resulting in a 50% decrease in rendering time

Projects

journal4me | *JavaScript, React, CSS, HTML, Python* — Voice Journal Summarizer

- Won 2nd place at Hack the North 2022 with the best use of Cohere's NLP program using AI libraries to transcribe, summarize, and classify the mood of voice journal entries

Badminton Tracker | *Java, OOP* — Tracker

- Developed an app to manage badminton tryouts using object-oriented programming principles with a scoring system to rank players based on various statistics