

Frank Xu

Software Engineer

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🕒 America/Toronto Timezone

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PROGRAMMING LANGUAGES

Python, SQL (Advanced)

C#, Java, JavaScript(React)
(Intermediate)

C, C++ (Beginner)

TOOLS, FRAMEWORK AND PLATFORMS

Pandas

Airflow

Hadoop

SQL Server

Snowflake

Material UI

Azure

EXPERIENCES

Senior Software Developer - Trading Research & Analytics

2022 - Present

Ontario Teacher's Pension Plan, Toronto

- Designed and developed web applications to enhance business analytical processes for capital market users with Python and React.
- Designed and implemented a robust Python-based data pipeline to process 5 million daily trading messages in real time, and persisted efficiently in Snowflake.
- Refactored and consolidated multiple projects into a reusable framework with extracted common components for improved efficiency.
- Led coordination sessions to capital market users on requirements collection and coding best practices.

Software Engineer - Risk Platform

2021 - 2022

TD Capital Markets, Toronto

- Developed a new module on the analytics platform to integrate new data sources with Java and Spring Framework.
- Built a web application to manage and display trading data with React.
- Developed Python-based internal tools to automate database deployment.
- Created unit and integration test cases for the analytics platform.

Data Scientist

2020 - 2021

TD Bank Group, Toronto

- Analyzed and predicted fraudulent activities using Python and SQL to identify opportunities to save \$2 million from CERB cheques.
- Developed a analytical process in Python to prevent unnecessary phone calls from customer support teams to save \$750k annually.

EDUCATION

MS in Computer Science

2023 - Present

Georgia Institute of Technology

Specialized in Computer Systems

- Software Development Process
- Computer Networking
- Machine Learning for Trading

BMath in Computer Science & Financial Management

2014 - 2019

University of Waterloo

- Database Systems
- Algorithms
- OOP
- Compiler
- Operating Systems

CERTIFICATIONS

Data Engineering Nanodegree

2022 - 2022

Udacity (6ZMGUAPD)

IBM AI Engineering Certificate

2020 - 2020

IBM (67VN38PA5Z4M)

IBM Data Science Specialization

2019 - 2019

IBM (MNL253B7L3VP)