

FRANK JIN

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TECHNICAL SKILLS

Languages	Python, C, C++, JavaScript/TypeScript
Frameworks	React, Node, Express, MongoDB, Firebase, GCP, Next.js, Flask

EDUCATION

University of Waterloo	September 2020 - April 2024
<i>BCS in Computer Science</i>	<i>Waterloo, ON</i>

- GPA: 3.97/4.00. Badminton Club Member, Undergraduate Marker for Calculus I (Fall 2021)

WORK EXPERIENCE

Squarepoint Capital	September 2022 - Present
<i>Software Engineer — Data Development</i>	<i>Montreal, QC</i>

- Developed ETL data pipelines with Python, Postgres, GCP, Nomad, and Bamboo for quantitative strategies

HSBC	January 2022 - April 2022
<i>Full Stack Engineer — Markets and Securities Services</i>	<i>Remote</i>

- Built a global trading dashboard in React including filtering tools, drilldown tables, and trade report generation
- Worked with internal tools for context linking and union views, reducing database calls by 25% and increasing data consistency on an in-house multi-threaded Scala backend framework
- Introduced Scala code-generation with abstract syntax trees reducing table development time by 95%
- Developed features in the Apache Beam streaming pipeline with Python as well as SQL procedures in BigQuery to filter and process over 500 trades per minute from Redis and various internal sources

McMaster University	January 2022 - August 2022
<i>Full Stack Developer — CANMOD Research</i>	<i>Remote</i>

- Created various article and research web-scraping tools with Beautiful Soup and Selenium for 50+ CANMOD researchers in a Flask web application, reducing manual search time by over 90%
- Assisted epidemiological researchers by developing a data pipeline for 100 years of infectious disease data, arranging R scripts and their resulting transformed tables into GitHub release assets

Heka Health	May 2021 - August 2021
<i>Full Stack Developer</i>	<i>Remote</i>

- Engineered 21+ reusable React components over 6 responsive pages for clients and physiotherapists including calendars and schedulers, payment and confirmation pages, and various dashboards
- Worked with Sequelize models, Next.js API endpoints, and Ant Design styled UI components to overhaul the entire physiotherapy appointment scheduling flow, increasing efficiency and reducing user wait times by over 20%

PROJECTS

Compiler

- C-style compiler in C++ with scanning, LR(1) parsing, and context-sensitive analysis with optimizations such as constant folding/propagation and dead-code elimination

Hexle

- Variation of Wordle with returning users from over 60 countries worldwide developed in React and TypeScript

Cashable

- Expense tracker built with React, Next.js, MongoDB, and Auth0 with visualization and management capabilities