

GLENN JOSEPH

416-779-7966 ◇ Toronto, ON
glennkjoseph@gmail.com ◇ [LinkedIn](#)

EDUCATION

Bachelor of Computer Science in Data Science, University of Waterloo 2020 - 2025
Relevant Coursework: Intro to Machine Learning, Distributed Systems, and Numerical Analysis.

EXPERIENCE

Quantitative Analyst Jan 2024 - Apr 2024, Jun 2023 - Aug 2023
BMO Capital Markets *Toronto, ON*

- Led development in volatility prediction app used for client portfolios totalling a value of \$1B+
- Improved implied volatility prediction accuracy by 20% through the development of a neural network using LSTMs
- Used Kalman filtering and skew stickiness ratios to predict IVs and backtest against other prediction methods
- Developed an automated checklist system that retrieved global financial events in real-time, allowing for up-to-date task tracking with freshness polling
- Resolved various bugs affecting performance, culminating in a downtime reduction of over 80%
- Configured load distribution and authentication using Nginx and Kerberos to enhance system reliability

Full-Stack Developer May 2021 - Aug 2021
Fairly AI *Kitchener, ON*

- Developed a workflow for registering machine learning models with government regulatory bodies
- Created AI summarization tools using React to facilitate communication between ML engineers and bank executives
- Implemented a versioning system for risk management reports using SQLAlchemy, reducing mistakes in reporting by over 30%
- Presented new features to senior management at client firms, leading to the implementation of additional enhancements

Software Developer Sep 2022 - Dec 2022
1907 Foundation *Kitchener, ON*

- Used Angular to improve layout and further develop a searching tool for academic papers
- Improved database processing by adding custom fuzzy-text searching capabilities
- Optimized SQL queries, resulting in a twofold increase in search speed
- Onboarded new hires, enabling a strong start within the team's development process

PROJECTS

Foster Estates Fractional real estate investment start-up. Developed a business model facilitating real estate investments between retail investors and homebuyers. This initiative led to our acceptance into Wilfrid Laurier's Startup Lab, where we conducted in-depth market research with over 100 participants. Additionally, pitched to Global Founders Capital, an investment firm with over \$3bn AUM.

FLASH Led a team of 3 developers and 1 designer to create a [first-person horror game](#) using a custom ray tracing engine built from scratch in Python.

SKILLS

Languages	Python, C, C++, C# JavaScript, F#, HTML, CSS, Bash, Racket, R, LaTeX, Assembly
Tools	React, Angular, .NET, Django, Flask, Linux, PostgreSQL, SQLite, SQLAlchemy, Firebase