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Experience

Cloud Developer | Royal Bank of Canada (RBC)

January 2024 - August 2024

- Developed an application with React, TypeScript, and Microsoft SQL used by 50+ developers and compliance teams to track vulnerability scores for 15,000+ enterprise devices.
- Integrated Azure Entra ID with ServiceNow ticket validation for secure, traceable access control.
- Built cloud infrastructure using **Docker** and **OpenShift** with automated horizontal scaling and load balancing.
- Optimized database performance by **reducing query time by ~30%** through caching and SQL optimization.
- Automated CI/CD with Jenkins, SonarQube, Checkmarx, and Artifactory. Implemented unit tests with Gen AI.

Teaching Assistant Ontario Tech University

September 2023 - December 2024

- Mentored 100+ students across 3 courses through advanced C++ concepts such as pointers, memory management, and data structures.
- Delivered individualized support, resolving technical challenges and fostering problem-solving skills, earning 90% positive feedback in student evaluations.

Technical Operations Intern | Modern Deploy Technology

May 2023 - September 2023

- Built a **document management application** using Svelte, TypeScript, and Supabase authentication, enabling secure access for **200+ users**. Implemented a Postgres Database to leverage cloud storage and store documents.
- Streamlined deployment processes, **reducing application deployment time by 40**% through optimized Vercel configurations.

Projects r0yce.com/projects

Kanjou - Cloud Powered Collaborative Editor

Firebase • NextJs • React • Typescript

- Developed a **real-time** collaborative text editor supporting **concurrent multi-user editing** with conflict resolution with React and Firebase.
- Implemented rich text editing with syntax highlighting for 20+ programming languages using Tiptap editor.
- Achieved <100ms latency for real-time document updates using Firebase on Snapshot listeners.
- Built custom middleware solution for Firebase adapter authentication in a serverless environment.

High-Frequency Forex Trading Bot

Python • Pandas • NumPy • REST APIs

- Built a data driven trading bot that uses machine learning to analyze high-frequency foreign exchange market data and detects signals via custom indicators and pattern analysis.
- Developed logic for trend reversals, volatility breakouts, and price action anomalies, executing **500+ trades** monthly with **65% success rate** in simulations.

Education

University of Ontario Institute of Technology

September 2021 - December 2025

Bachelor of Science (Honours) in Computer Science - 3.89 GPA

- Dean's and President's Honors List 2022 2025
- Relevant Coursework: Software Design & Integration, Algorithms & Data Structures, Web Design, Computational Photography, Programming Languages, Machine Learning, Compilers, Systems Programming

Skills

Languages: Python, Java, Rust, Go, JavaScript, SQL, C++, C#, C, Assembly, Lua

Frameworks & Tools: React, Next.js, Flask, Docker, Jenkins, Git, REST APIs, Svelte, Selenium, Bash

Cloud Platforms: Google Cloud, Microsoft Azure, Firebase, Red Hat OpenShift

DevOps & Security: HashiCorp Vault, SonarQube, Artifactory

Data & ML: PyTorch, TensorFlow, Scikit-Learn, Keras, Pandas, NumPy, PostgreSQL, MSSQL