

Dinusanth Surendran

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Education

McMaster University

Expected Graduation: Dec 2028

Bachelor of Technology | Advanced Diploma in Chemical Engineering | Certificate of Business

Hamilton, ON

- C++ Programming, **Object-Oriented** Programming, Systems Engineering Fundamentals, Math 1 to 4

Work Experience

Royal Bank of Canada

May 2025 – Dec 2025

Automation Analyst

- Rewrote legacy **Python** scripts into **production-grade systems** for enterprise **automation**; pushed code into production.
- **Built** and deployed a **backend** pipeline to convert **1000+ financial** records/week into structured CSVs, by reducing parsing failures and **improving ledger consistency**.
- **Collaborated** refactored, unit tested, and documented multiple previous legacy codes for production while developing a root cause analysis using NLP specifically BERT

LB Connect - Mortgage FinTech Startup

July 2025 – Dec 2025

Software Engineer

- **Collaborated directly** with CTO to plan task sprints and maintain <5% bug regression rate post-release.
- Promoted to codebase **gatekeeper** after 2 months, approved backend code pushes, reviewed PRs, and managed **production releases**.
- Directed **database** refactor for SAP Concur exports, added indexing, error handling, and schema validation which improved consistency 4x.

Tremeng Inc.

June 2023 – Aug 2023

Software Analyst

- **Redesigned** client-facing dashboards **using JavaScript, HTML, and CSS**, **improving load speeds by 25%** and enhancing user experience.
- **Debugged and optimized** front-end components, resolving **90% of reported UI bugs** ahead of release deadlines.
- **Collaborated** with senior engineers to integrate user feedback into design improvements, **boosting client satisfaction metrics**

Leadership Experience

Young People Achieving Milestones – YPAM

Aug 2018 – PRESENT

Executive Treasurer | Volunteer Program Leader | Program Coordinator

- **Promoted** from volunteer leader to Program Coordinator to **Executive Treasurer**, reflecting consistent impact and leadership in youth initiatives.
- **Oversaw budget and financial planning** for youth programs and events, **managing \$10K+** in annual funds to ensure sustainable growth.
- **Organized** annual spelling bee and mentorship programs with **300+ participants**, scaling event reach and engagement each year.
- **Created digital registration and scheduling systems**, reducing coordination errors by **25%** and **improving volunteer efficiency**.

Founder | CEO

- **Directed** a team of 50+ volunteers, implementing scheduling automation to **cut event coordination time by 35%**.
- **Organized** fundraising and mentorship programs serving 500+ community members, **increasing annual participation by 40%**.
- **Built** digital infrastructure (Google Workspace + Microsoft Office + automation) to streamline internal communications.

Nilal Clothing - Custom Clothing Brand

Feb 2023 – PRESENT

Founder | CEO | Designer

- Automated order tracking + sales reporting using **Python + Google Sheets API** → **saved 10+ hrs/week**.
- Managed **end-to-end operations**: supplier sourcing, logistics, and customer support.
- Optimized marketing campaigns through **A/B testing** and **analytics-driven insights**, increasing conversion rates by **15%**.

Projects

Quant Backtester Pro (Python, Streamlit)

- **Developed** a modular backtesting engine in Python with Sharpe ratio, drawdown, and volatility metrics, **enabling 10+ strategies to be tested efficiently**.
- **Integrated** Streamlit UI for interactive visualization, **allowing real-time portfolio analysis**.

Inbox-to-Insights (Gmail Summarizer, Python + GPT API)

- **Built** a natural language processing pipeline to parse and summarize emails using OpenAI APIs, **classifying 500+ emails/month into actionable insights**.
- **Automated** Excel + email-ready reports, **saving end users 5+ hours weekly**.

Options Trading Platform (Python + SQL)

- **Designed** a trading simulator supporting Black-Scholes + Monte Carlo option pricing, **analyzing 1000+ contracts daily**.
- **Integrated** SQL backend and Python dashboard to track option Greeks and portfolio risk exposure, **helping users model real-world hedging strategies**.

Technical Skills

- **Languages:** Python, C++, Java, JavaScript, SQL, HTML/CSS
- **Frameworks/Tools:** Git/GitHub, REST APIs, Flask, Docker, Streamlit, Pandas, NumPy, Agile
- **Databases:** MySQL, PostgreSQL
- **Systems:** Windows, AWS (EC2, S3 basics)
- **Other:** SDLC, Unit Testing (pytest, JUnit), Excel (VBA), PowerBI

Certificates

- Meta Back-End Developemnt (Courses 1 to 3)
- Automate the boring stuff with Python Programming
- Microsoft Excel – Excel Beginner to Advanced