

# Cherith Boya

cherithboya.com | cherith.boya@gmail.com | +1 647 395 7539 | LinkedIn | Github

## Education

---

### University of Guelph

B.Eng Honours Computer Engineering

Guelph, Ontario

Expected Graduation: April 2028

- **Key Courses:** Data Structures, Digital Systems Design, Operating Systems, Analysis and Design of, Computer Algorithms, Large-Scale Software Architecture, Microcomputer Interfacing, Signal Processing, Electronic Devices, Electric Circuits, Advanced Computer Architecture, Communication Systems, Discrete Structures in Computing, Embedded Reconfigurable Computing Systems

## Work Experience

---

### Math and Reading Instructor Assistant

Kumon - Mississauga, ON

Mississauga, Ontario

Sept 2021 - February 2023

- Assessed performance data to identify gaps and provided tailored improvement strategies, developing skills in analysis and solution-building.
- Simplified complex concepts into clear explanations, mirroring the communication required in client-facing consulting work.
- Coordinated front-desk operations and interacted with parents, building organizational and interpersonal skills.

## Projects

---

### Miniature Wheelchair Systems Design

C++, Arduino Integration

Guelph, Ontario

Sept 2024 - December 2024

- Led a team in delivering a fully functional wheelchair system, managing project scope, task delegation, and trade-offs to exceed requirements with a 105% evaluation.
- Applied structured problem-solving by evaluating alternative designs, balancing technical feasibility with user-focused outcomes.

### Credit Card Fraud Detection

Pandas, Numpy, ML

Brampton, Ontario

January 2026

- Built a machine learning system that analyzes credit card transactions to identify potentially fraudulent activity.
- Trained and compared multiple models, including Logistic Regression and Random Forest, to improve fraud detection performance.
- Tuned the model's decision threshold to balance catching fraud while minimizing false alerts on legitimate users.

### University Management System

Java, JavaFX, OOP

Guelph, Ontario

Jan 2025 - April 2025

- Built a backend with Excel integration to automate data management, enabling efficient reporting and real-time synchronization across student and admin modules.
- Developed structured processes for registration, tuition tracking, and academic records, aligning requirements across multiple user groups.
- Evaluated and reconciled stakeholder needs by implementing role-based access controls, ensuring both functionality and security, which supported a 100% project score.

## Technological Skills

---

**Languages:** Python, C++, C, Java, HTML, CSS, JavaScript, SQL, Typescript, MATLAB, VHDL

**Tools and Technologies:** Git, GitHub, Vercel, Linux, VMware, Node.js, Docker, Power BI, JIRA, VS, AWS

**Frameworks and Libraries:** React, Next.js, Tailwind CSS, Flask, Django, NumPy, Scikit-learn, Pandas, JavaFX