Joshua Choong

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Technical Skills

Languages: Python, C, TypeScript, JavaScript, HTML, CSS, Java, LaTeX, Dart
Libraries and Frameworks:Pennylane, Scikit-Learn, Tailwind CSS, Flask, Axios, Vite, Node.js, Flutter
Tools and Methodologies: Git, Docker, Cursor, Claude Code, Node.js, Jenkins, Agile Standups, Scrum, Jira, Linux

Projects

Hybrid Quantum-Classical ML Classifer · Python, Pennylane, Quantum Computing, MLflow *Feb. 2026*
- Developed a hybrid Quantum-Classical ml classifier, achieving a 7% improvement in accuracy over classical models
- Utilized pennylane to design and implement quantum circuits that processed data in a non-euclidean space
- Applied standard research software development policies including reproducibility, documentation, and git control

Safe Biking Routes App · React, TypeScript, Python, Axios, Flask *Jun. 2025*
- Developed a customized A* algorithm to create personalized route pathing, creating an optimal path that balanced the safety and expected time of arrival, optimizing the quality of experience for a diverse userbase.
- Implemented data-driven route pathing, avoiding historically dangerous intersections and prioritizing cyclist safety

LifeCost AI · React.js, Axios, Flask, Vite, Node.js, Supabase *Mar. 2025*
- Developed a full-stack application to assist users in achieving their life goals by providing personalized advice
- Created a frontend with React.js, Tailwind CSS, and Axios for API requests to a Supabase DB and Flask backend
- Prompted users to upload progress photos and analyzed them real-time by leveraging Google Gemini VisionPro, ensuring that users were on the right track and encouraging them to continue on the path to completing their goals

Guelph Engineering Competition · Flutter, Dart, Git *Oct. 2024*
- Developed a full-stack mobile and web application using the Dart language and Flutter framework
- Created a superior course selection software for students, optimizing student schedules and course loads
- Won 1st place among 30+ competitors from all years of study by creating a user-friendly and efficient application

Experience

Campus Organizer @ Google Developer Groups on Campus - Guelph ON *Sep. 2025 - Present*
- Selected by Google as the University's Campus Organizer, managing a developer group with 647 students
- Ideated and pitched initiatives to Google, securing funding for 5 technical workshops and a 36-hour hackathon
- Oversaw the hiring and coordination of 13 personnel in Financial, Technical, Marketing, and Events departments

Data Entry Assistant @ Hawkey Church Management - Mount Forest ON *May. 2025 - Sep. 2025*
- Utilized Excel VBA and Google Maps API to generate graphical visualizations of the companies construction sites
- Wrote Python scripts to modernize databases, adding Optical Character Recognition on legacy documents
- Designed organizational tools for tracking and managing construction projects, improving efficiency by 70%

Construction Worker @ Hawkey Church Management - Mount Forest ON *Jun. 2024 - Sep. 2024*
- Adapted quickly in a fast paced environment, efficiently learning contemporary industry-level skills and techniques

Education

University of Guelph Guelph, ON
B.Comp. in Computer Science Co-op, Stats minor *Sep. 2024 - Apr. 2028*
Relevant Coursework: Linear Algebra, Calc III, Statistics, Data Structures and Algorithms *GPA:* 3.72/4.0

Extracurriculars and Volunteering

Hackathon Coordinator @ Google Developer Groups on Campus *Sep. 2024 - May 2025*
- Ran an event with 260 accepted applicants, coordinated 15 volunteers and secured $5000 in funding
- Co-directed several technical events including Webdev, React.js, Cloud Computing and Firebase Workshops
- Comprehensively trained and led a team of volunteers to assist an average of 60 attendees per event

Computer Science Club Leader *Sep. 2023 - Jun. 2024*
- Mentored advanced students by teaching concepts such as graph traversal, dynamic programming and recursion
- Fostered a conducive learning environment by promoting diversity and equality amongst members and attendees
- Introduced 40+ members to Python fundamentals, mentoring them in creating their own passion projects