William Li

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EDUCATION

University of Waterloo   Waterloo, ON
Pursuing BASc in Computer Engineering   *Sept. 2021 – Apr. 2026*
- Relevant Coursework: Data Structures & Algorithms, Compilers, Computer Networks, Computer Security, Discrete Math, Database Systems, Machine Learning, Operating Systems

EXPERIENCE

Health and Rehab Research Inc   June 2023 – Aug. 2023
Machine Learning Engineer   *Mississauga, ON*
- Developed a Python application for real-time tracking of 33 key body landmarks and prediction of 4 additional landmarks, adopted by 4 health teams.
- Created a Tkinter interface and integrated an emotion prediction model for the above application, enabling simultaneous movement and emotion tracking during exercises.
- Built a neural network achieving 85% accuracy in predicting emotions based on recorded movement data to support chronic lower back pain diagnosis.

Rogers Communications   Sept. 2022 – Dec. 2022
Network Engineer   *Brampton, ON*
- Led a project to automate monthly processing and export of key-performance indicators using Python scripts, reducing manual report generation time by 95%.
- Developed a PHP web application enabling export of team-specific core data, and processing of data files via Python scripts, which was adopted by 15 core engineering teams.
- Wrote Groovy scripts to explore the automation of Python-based workflows within Jira Cloud, improving operational efficiency.

Waterloo Experience Accelerate Program   Jan. 2022 – Apr. 2022
AI for Financial Services Project Team Member, Microsoft – Azure & AI Fundamentals   *Waterloo, ON*
- Led security and privacy procedures for a 5-member team designing an AI-driven financial service under RBC mentorship.
- Designed a financial service using MS Azure Machine Learning and MS SQL Database to provide accessible and personalized investment recommendations.
- Planned a financial info Q&A bot utilizing MS Azure's QnA service trained using a knowledge base supplied with general investment info provided by financial institution advisors.

PROJECTS

ASTunnel | *JavaScript, ReactJS, React Bootstrap, TensorFlowJS, ThreeJS*   Feb. 2025 – Mar. 2025
- **Link:** ASTunnel
- Developed an interactive web game leveraging TensorFlowJS and ThreeJS to facilitate ASL learning.
- Utilized TensorFlowJS for real-time ASL gesture recognition via webcam-based computer vision techniques.
- Designed an intuitive React-based UI to provide an engaging and accessible learning experience.

Budget Tracker | *JavaScript, ReactJS, React Bootstrap, Supabase*   Mar. 2024 – Mar. 2025
- **Link:** Budget Tracker
- Built a budget management application with a React frontend and a PostgreSQL backend using Supabase.
- Implemented real-time updating charts and trackers for seamless budget and expense management.
- Integrated authentication and user management with Supabase, allowing secure access to financial data.

TECHNICAL SKILLS AND CERTICIFICATIONS

Programming Languages: Python, C, C++, Java, JavaScript, HTML/CSS, PHP, MySQL, MATLAB
Technologies: Keras, Scikit-Learn, TensorFlow, OpenCV, Flask, Vite, ReactJS, Node.js, Bootstrap, Tailwind CSS
Developer Tools: Git, Jira, MS Azure, MS PowerBI, VS Code, Intellij IDEA, PhpStorm, MySQL Workbench, Supabase, Firebase
Certifications: MS Azure Fundamentals, MS Azure AI Fundamentals