Matthew Lew

Education

Toronto Metropolitan University

Sep. 2021 – May 2026

Honours Bachelor of Science (HBSc), Computer Science (Co-Op), Minor in Cybersecurity

• CGPA: 3.86

• Awards: Dean's List 2021–2025

• Relevant Coursework: Algorithms, Data Structures, Operating Systems, Database Systems, Artificial Intelligence, Software Engineering

Technical Skills

Programming Languages: Python, Java, C/C++, JavaScript, TypeScript, Bash

Web Development: HTML, CSS, React, Node.js, Next.js
Database: SQL, MySQL, SQLite, OracleSQL, Pandas

Other: Git, Docker, Azure DevOps, Agile Development, Linux, Jenkins, AWS

Soft Skills: Communication, Teamwork, Initiative, Problem Solving

Experience

Mitsubishi Heavy Industries RJ Aviation (MHI RJ)

May 2023 - Aug. 2024

Data And Application Services Developer

Missisauga, ON

• Navigator IETP | Python, Java, MySQL, Jenkins, Maven, Tomcat

- Primary Developer maintaining the Navigator IETP Technical Publications application (web and standalone versions).
- Implemented server and database migration changes, increasing application profit by 40%.
- Developed and maintained Python scripts that encrypt and index tech pub data.
- Took initiative by taking over as primary technical support team member.
- Improved and updated source code and installation documentation on legacy java application.
- Automated Operator Data Pipeline | Python, SQL* Loader, Pandas, OracleSQL, Cron
 - Independently took initiative to propose, design, and implement automation for a manual data loading process, saving up to 5 hours per week.
 - Developed a Python script and SQL* Loader control files that fetch and load data into an Oracle database and generate an email report, running daily via a Cron-job command.
- HTML/XML IETP | JavaScript, Electron, Chromium, Node.js, React, MySQL
 - Worked in a team to develop a new IETP app to handle PDF, HTML, and XML data.
 - Collaborated with business and finance teams to gather technical and business requirements to discuss feature feasibility and tech stack design.

Projects

AI Resume Tailor Web App | Next.js, Tailwind CSS, OpenAI API, Prisma, SQLite, Git

Jun. 2025

- Developed an AI-powered web app that generates tailored LaTeX resumes and cover letters by analyzing user resumes and job descriptions using OpenAI's GPT model.
- Implemented parsing for LaTeX and PDF uploads into structured JSON stored in a local SQLite database.
- Built a dynamic interface for users to manage resume sections like education, skills, experience, and projects.

Adult Income Machine Learning Classifier | Python, Pandas, NumPy, scikit-learn, Git Apr. 2025

- Built a machine learning pipeline to classify adult income levels using census data from the UCI repository.
- Performed data cleaning, categorical encoding, feature normalization, and applied SMOTE to address class imbalance.

Robot Shootout | C/C++, OpenGL, GLUT, Git

Dec. 2024

- Built a real-time 3D game where players defend against attacking robots using a controllable animated cannon.
- Implemented frame rate-independent animation, collision detection, and dynamic texture mapping.