Thomas McKee

✉ thomasenmckee@gmail.com 📞 (204) 230-0405 📍 Winnipeg, MB 🔗 thomasenmckee.com

Education

Bachelor of Science in Computer Engineering (Co-op)
University of Manitoba
- Cumulative GPA: **4.32**
- Expected date of graduation: April 2027

Engineering Work Experience

Engineering Co-op Student   April 2024 – August 2024
Manitoba Hydro
- Performed wind integration and battery analysis studies as part of a three-person team, using short and long-term production cost modeling software (PSR-NCP and SDDP) to assess future energy system scenarios and optimize resource dispatch.
- Developed Python script utilizing libraries such as Pandas to automate the processing of simulation data as part of a wind integration study.
- Authored a detailed technical report on wind integration, outlining previous and current methodologies, results, and future recommendations, and presented findings to department members.
- Produced Microsoft Excel workbooks to extract simulated data and analyze capital expenditure for an HVDC transmission line feasibility study.
- Created and presented battery analysis findings to colleagues across multiple departments, detailing the methodology, results, and recommended next steps to guide future project direction.
- Participated in daily team meetings to discuss daily goals and report on project progress.

Other Work Experience

Server   June 2025 – October 2025
Olive Garden Family Restaurant
- Delivered efficient service while collaborating with team members in a fast-paced environment.

Grocery Clerk   December 2019 – April 2024
FreshCo Regent & Lagimodiere
- Entrusted with manager-on-duty responsibilities, overseeing store operations and coordinating maintenance orders.
- Resolved customer service issues and conflicts to maintain high customer satisfaction.

Engineering Project Experience

Command and Data Handling   2023 – Present
University of Manitoba Space Applications and Technology Society
- Wrote low-level code for an STM32 microcontroller.
- Wrote a driver to interface with an external SRAM IC over the SPI protocol, using a logic analyzer to debug communication issues.

TailwindKOM   2025
- Built a React and Tailwind CSS web application that integrates the Strava and OpenWeatherMap APIs using OAuth 2.0 to rank cycling segments based on real-time wind conditions.

5-Bit Full Adder   2026
- Hand-soldered a transistor full adder and resolved cascading and logic-level issues.

Technical Skills

Programming Languages
Python, C, C++, Java, MATLAB, Assembly, HTML, CSS, JavaScript

Tools & Engineering Software
Git, VS Code, KiCad, FreeRTOS, LaTex , MS Office Suite, PSR-NCP/SDDP

Frameworks & Libraries
PyTorch, NumPy, Pandas, React, Node.js, Tailwind CSS, Open MPI, OpenMP

Licenses
Class 5 Driver's License