

Matthew Flaherty

Canadian & US Citizen • matthewflaherty77@hotmail.com • 514-217-5883

LinkedIn - www.linkedin.com/in/matthewflaherty9 • GitHub - www.github.com/mattflahertyv

Portfolio Website - mattflahertyv.github.io/Portfolio-Website/

SKILLS AND QUALIFICATIONS

Operating Systems | MacOS • Windows • Linux • iOS

Applications | Eclipse • IntelliJ/PyCharm/CLion • VSCode • MS Visual Studio • MS Word/Excel/PPT

Programming | Java • C# • C • C++ • Python • JavaScript • React Js • Typescript • HTML/CSS • SQL • Go

Other | GitHub • Jira • Figma • Power BI • Jaspersoft • Auto CAD • Android Studio

Languages | English and French

EDUCATION

Bachelor of Engineering – Software Engineering

(January 2022 – May 2025)

Concordia University, Montreal, QC

- Member of the Institute for Co-operative Education
- **GPA: 3.84 – Dean’s List**
- Relevant Courses: Data Structures and Algorithms, Object Oriented Programming, Data Analytics, AI & ML

HACKATHON EXPERIENCE

ConUHacksVIII 2024

(January 2024)

- Successfully led a team during the Concordia Hackathon 24-hour challenge, overseeing the creation of real-time animated graphs utilizing big data.

WORK EXPERIENCE

Internship – Full Stack Developer

8 Months (September 2024 – April 2025)

CAE, Montreal, Canada

- Designed and developed front-end components and pages for internal tools using React Js and TypeScript.
- Engineered backend API endpoints in C# enabling seamless front-end integration and efficient data transfer.
- Created and optimized SQL scripts, developed and maintained database tables, views, and indexes to support robust data management and reporting.
- Collaborated in an agile environment, participating in sprint planning, grooming, daily scrum meetings and code reviews to maintain a streamlined development process.

Internship - Junior Software Engineer

12 Months (May 2023 – May 2024)

Phoenix Solutions Inc, Canada

- Developed an array of SQL queries to generate comprehensive product and inventory reports.
- Crafted and implemented visual sales and inventory dashboards for clients through the proficient utilization of SQL queries within the Power BI framework.
- Collaborated within a team to conceptualize and integrate innovative functionalities into the corporate website leveraging agile methodologies including sprint-based development, employing React JS, CSS, and BBJ.
- Conducted remote video conferences with customers to provide guidance on ODBC connection setups.

PROJECTS

Smartess Home Systems – Capstone Project (Javascript, Typescript, Go)

(September 2024 – April 2025)

Concordia University, Montreal, QC - Website available at <https://smartess.vercel.app/>

- Directed a 10-member team in orchestrating the development of a home system using React.js, JavaScript, TypeScript, Go and Firebase, split into a website team and a hub device team.
- Employed Agile development methodologies, conducting weekly meetings to foster collaboration, adaptability, and consistent progress towards project milestones, while orchestrating CI/CD pipelines using GitHub.

Facial Recognition – Artificial Intelligence (Python)

(May 2024 – July 2024)

Concordia University, Montreal, QC – GitHub link available [here](#)

- Developed a robust data preprocessing pipeline, automating tasks like duplicate removal, image resizing, and data splitting to optimize the dataset for AI model training.
- Trained and evaluated multiple Convolutional Neural Network (CNN) architectures, implementing cross-validation and early stopping to improve model accuracy and reduce overfitting.
- Conducted bias detection and mitigation based on race and gender metrics, enhancing the model's fairness through targeted data augmentation and evaluation of performance across demographics.