Félix Mainville

University of Guelph student, B.CS Computer Science (Co-op)

CONTACT

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TECHNICAL SKILLS

Languages | 'C', Python, Java, 'R', SQL, HTML, CSS, Rust
Operating Systems | Mac OS X, Linux (Debian, Arch), Windows
Development Tools | VS Code, Cursor, GitHub/GitLab, Docker, Valgrind, Vercel, MariaDB, Azure, Google Cloud

OTHER SKILLS

Mathematics | Algebra, Calculus, Discrete, Statistics
Computer Coding |Problem Solving, Solution Design, Algorithms
Tutoring | Mathematics, Computer Science, French
Sports | Golf, Hockey

LANGUAGES

French, English | Fully bilingual in both official languages, oral & written

Personal Projects

- **Optimal Routing System for a Lawn Care contractor | 2024**
  - Developed using Python
  - Uses Google Cloud API for Geolocation Data & Function Calls
  - Uses dynamic information to determine daily route for multiple crews

- **Personal Portfolio Website | 2024**
  - Web Coding with React.js, Next.js, TailWind css deployed on the Vercel platform
  - Highlights personal profile, Educational history, academic interests, coding projects

- **2D Battle Game, Python Coding Project | 2022**
  - Self-guided academic learning project
  - The game is set in Shakespeare's "Hamlet". The game involved characters from the play, and the objective of the game was to win 1 v 1 'Street Fighter' style battles.
  - The project was a semester game development that allowed a creative approach in the reenactment of the final duel in Shapespeare's play.

Work Experience

IT Service Technician 2025 (May-Dec placement)
Municipality of Chatham-Kent
- Replacing hardware (Hardware Lifecycle Replacement Project)
- Providing technical/remote assistance and training to system users
- Installing hardware and peripheral components at various municipal locations
- Performing minor repairs to computer hardware and software

Technical Support (Weekends) 2022 - 2024
MITC Solutions Inc.
- Diagnosed and resolved hardware and software issues for laptops and computers
- Provided remote assistance to users with desktop applications
- Imaged and configured workstations

Lawn Maintenance (Summers) 2022-2024
JCZ Home & Property Management

Landscaper and Labourer (Summers) 2020-2022
JCZ Home & Property Management

AWARDS

University of Guelph - 2023
Scholarship offer to Computer Science Programs

Dean's List - Year 1, University of Guelph, B.CS Computer Science Program

ÉSPC - Business Management Awards Recipient award given to the student with the highest course grade

Honours List - High School (Academic track - Gr 12)

Education

Bachelor of Computing Honours, Computer Science (Co-op) | 2023-Present

University of Guelph, Guelph, ON

- Completing a minor in Statistics
- Maintaining an 84% average
- Dean's Honour List for Fall 2023, Winter 2024 and Fall 2024 semesters

Key Academic Projects

VCard File Parser (developed in C, Python and SQL) | 2025

- Built shared library files in C to interoperate with Python frontend
- Used Asciimatics Python Library to build intuitive front end
- Followed specific VCF file format requirements and applied debugging tools for functional and memory safe parsing
- Used MariaDB for data storage and queries of contacts and vcf files

Investment Portfolio App (developed in Java) | 2024

- Implemented Object-Oriented concepts for large scale application
- Used hashmap data structures for efficient searching and handling of many investments
- Created a GUI interface to integrate with back-end code while writing proper documentation

Animal Classification Machine Learning Tool (developed in C) | 2023

- Implemented several mathematical measures to measure similarity between data
- Implemented the 'k-Nearest Neighbour' machine learning algorithm with different similarity metrics to classify animals based on specific characteristics

Automobile Database Manager (developed in C) | 2023

- Implemented database management solution using dynamic linked list data structure and Valgrind to manage and detect memory leaks within the program
- Used sorting algorithms to sort cars based on specific properties for each car

École Secondaire Catholique de Pain Court Pain Court, ON

- High School Student - Sept 2019 - June 2023
- Grade 12 Graduate, Honours