Ethan McAuliffe

3rd year Computer and Management Engineering student

https://github.com/emcauliffe

(416)559-5145

ethan@emcauliffe.ca

https://www.emcauliffe.ca

Education

McMaster University   Hamilton, ON
Bachelor of Computer and Management Engineering (Co-op)   Sept. 2018 - Present
- Completed 2.5 years (Cumulative 3.8 GPA)
- *CompEng 2SI4 & 2SH4* - Acquired an in-depth understanding of Python, C, and Java through labwork and testing (mark: 4.0 & 3.8 respectively)
- *CompEng 2DI4* - Developed knowledge on logic design and Verilog (mark: 4.0)

Royal St. George's College   Toronto, ON
Ontario Secondary School Diploma (and AP credits)   Sept. 2014 - June 2018
- *TEI4M* - Learned the fundamentals of computer engineering through a variety of projects such as building a breadboard computer, programming PWM fan control with USART readout in assembly, and more

Work Experience

Risk and Control Automation Analyst   Toronto, ON
Royal Bank of Canada   Jan. 2021 - Present
- Gained experience working with Jira, Confluence, and ServiceNow
- Very recently started working in this position

Software Engineering Intern   Toronto, ON
RT7 Inc.   May 2019 - Aug. 2019
- Contributing member of a development team in a work environment
- Wrote documentation for existing Swift codebase
- Rebuilt existing product from scratch with React Native, uniting Android and iOS codebases
- Practised attention to detail when generating new apps and publishing with accurate info to the App Store
- Gained experience with GUI development through collaboration with design team

Summer Intern   Toronto, ON
Achiga Inc. & Concierge Plus   July 2018 - Aug. 2018
- Reduced accounts receivable over 90 days by 80+% through effective communications with past due customers
- Extensive experience identifying and eliminating anomalies with money records/data
- Developed professional interpersonal skills through daily interaction with customers

Personal Projects

Bottles Against COVID
- Built a full-stack website to facilitate contactless bottle drives during the COVID-19 pandemic
- Ran a bottle drive every week and raised over $3000 for St. Joe's Hospital in Toronto

DeltaHacks VI Hackathon - StoryTime
- Worked in a team of 3 to build a React Native mobile application + REST API backend to generate short stories for users to read instead of scrolling through social media feeds

4-Bit Transistor-Transistor Logic (TTL) Computer
- Gained extensive knowledge in the working of computers on a binary programming level

Extracurriculars

Software Lead at McMaster Mars Rover   July 2020 - Present
McMaster University
- Coordinate and participate in the development of software for the McMaster mars rover with a team of bright and motivated individuals
- Work with ROS to create a rover capable of autonomously or manually completing tasks like GPS waypoint navigation, obstacle avoidance, precise arm control, object detection, environment mapping, and more

SHAD Valley   July 2017
Lakehead University
- Worked with other participants from across the country to develop a product and a business plan with the goal of reducing the energy footprint of individual Canadians
- Placed 1st regionally & qualified for national SHAD Cup competition

Ice Hockey   2006 - Present
- Former member of rep level hockey, high school varsity teams
- Current member of McMaster intramural teams
- Instrumental in my development of teamwork skills and ability to work in a fast-paced environment

Volunteering

Technical Assistant (TA)
Royal St. George's College   Sept. 2017 - June 2018
- Selected for a leadership role teaching younger students basic electronic circuits, Arduino programs, and technical writing
- Assumed a position of responsibility requiring maintenance and supervision of school workspace

Skills

Software
- Git
- Flask & FastAPI
- EAGLE PCB design
- Autodesk Inventor & Fusion 360
- LaTeX
- Nginx
- *NIX Systems (Debian, FreeBSD, OS X)
- Quartus II
- Atmel Studio 7

Programming Experience
- Java
- Python
- C & C++
- Verilog
- AVR Assembly
- JavaScript
- ReactJS & React Native
- Swift
- MATLAB
- Bash (zsh)
- I^2C
- SPI
- USART

Communication
- English
- French (DELF B1 Certified)