

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

Bachelor of Computer and Management Engineering (Co-op)

Hamilton, ON
Sept. 2018 - Present

- Completed 2nd year Engineering (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)

Royal St. George's College

Ontario Secondary School Diploma (and AP credits)

Toronto, ON
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

Software Engineering Intern

RT7 Inc.

Toronto, ON
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
- Learned JavaScript and development best practices in the process
- Practiced attention to detail when generating new apps and publishing with accurate info to the App Store

Summer Intern

Achiga Inc. & Concierge Plus

Toronto, ON
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

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
- L^AT_EX
- Nginx
- *NIX Systems (Debian, FreeBSD, OS X)
- MongoDB
- VSCode
- Xcode
- Atmel Studio 7
- QuickBooks, QuickBooks Online

Programming Experience

- Java
- Python
- C
- C++ (Arduino)
- AVR Assembly
- JavaScript
- ReactJS & React Native
- Swift
- MATLAB
- Bash (zsh)
- I²C
- SPI
- USART

Communication

- English
- French (DEL F B1 Certified)