# linkedin.com/in/callum-may



2013 - 2018

github.com/callumdmay



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Computer Engineering student with a strong foundation in software development, a driven mindset and a passion for new technologies that improve the way we live. Pursuing full-time opportunities after graduation in May 2018.



Education

### McGill University Bachelor of Engineering in Computer Engineering (B. Eng)

Expected graduation May 2018; CGPA 3.9/4

- Dean's honor List (1st & 3rd year)
- Beverly and Arthur Mendel Family Scholarship
- Engineering Class of 1983 Scholarship
- Winner of Fall 2015 Design Principles and Methods Robotics Contest GitHub
- Exchange semester abroad in Melbourne, Australia (Feb 2016 June 2016)



# Work Experience

# Amplify Developer - Royal Bank of Canada

Toronto, ON - *May 2017 to Aug 2017* 

- Worked as part of a four-student team that independently designed, prototyped and implemented an iOS app based on stakeholder requirements. At the end of the summer we pitched our idea to RBC executives.
- I was the primary developer of the backend API microservices, implemented using Node.js Serverless framework and supported by a DynamoDB database. The application was deployed through Lambda and API Gateway.
- I also assisted in the development and training of our object detection algorithm, based on tinyYOLO and Darknet, deployed on Apple's new CoreML framework within our iOS app.

#### Front End Developer Intern - Busbud

Montreal, QC - Jan 2017 to Apr 2017

- Worked closely with the product and design team to improve the performance, functionality and reliability of the main website on both mobile and desktop, primarily using React and Node.js.
- Implemented various features at different stages in the booking flow intended to increase funnel conversion rate, sometimes by up to 5%.

### Software Engineering Intern – Replicon

Calgary, AB - Jun 2016 to Dec 2016

 Implemented continuous delivery best practices through integration with Amazon Web Services; building code pipelines and automating unit testing through integration with AppVeyor and AWS Code Pipeline

Calgary, AB - May 2015 to Aug 2015

- Developed a C# command line scripting application to migrate the entire Replicon code repository from AccuRev to Git.
- Provided unit testing and bug fixing throughout various products and services in order to improve product reliability.



Baylis Scholarship

### **Personal Projects**

John Howard Ambrose Scholarship

• Rio Tinto - Richard Evans Exchange Award

# **Elevate - Chrome Web Store**

JavaScript (React, Preact), HTML, CSS

- A new tab extension for Chrome designed to improve productivity. Downloadable on the Extension Store.
- Integrates with Unsplash's photo API to provide beautiful, customizable background photos each hour. Includes common productivity tools like a notepad and task list.
- Additionally planned features include API request caching, GA/tracking, external integrations such as Wunderlist and Trello.

### **Hockey Event Analysis in Broadcast Video**

MATLAB, Python, TensorFlow

• Under the supervision of Professor Martin Levine we are developing a neural network that can detect actions during broadcast hockey games such as passes or shots. To simplify detection each video action sequence is processed into a single image using a Dynamic Image Neural Network. Our classification network is then trained on the resulting image.

#### Pi Notification Center - GitHub

Python, Node.js (Electron), JavaScript, HTML, CSS

• A notification center built for the Raspberry Pi touchscreen using Electron. Integration with multiple 3rd party API's including weather, sport scores, and Google Maps route information.



# Technical Toolbox

#### Experienced

• C#, CSS, HTML, Java, JavaScript (React, Express, Serverless), Node JS, Python, React Native, Swift 2/3

#### **Familiar**

• C, C++, MATLAB