

EDUCATION

University of Waterloo

Sept 2016 – Apr 2021

Bachelor of Computer Science (Honours Co-op)

Waterloo, ON, Canada

Activities: CS Club, Pure Math Club, Waterloo, Hack the North, HackPrinceton, NASA SpaceApps

Relevant Coursework: Object Oriented Software, Physics I & II, Hardware, Logic, Functional Programming

EXPERIENCE

Beyond One Eighty 

May – Aug 2017

Software Developer - Node.js, Backbone.js (MVC), MongoDB, Python

Waterloo, ON

- Built and shipped a **GIS** based portal, from ground-up, to manage and visualize critical marine **geodata**.
- Utilized **Backbone.js** MVC framework for structuring the application and **Mongoose** for data modelling.
- Devised a **search engine** to conduct complex, customized queries and designed a front-end for it.
- Reviewed approval process, **reduced** database calls by **half** and improved loading speed **exponentially**.
- Streamlined cloud storage with a file indexer to deduplicate similar data uploaded from different channels.
- Developed a **Python BS4** scraper to synchronize and integrate metadata of over **700** blog posts.

SpaceX Hyperloop: Waterloo 

Oct – Dec 2016

Admin Team

Waterloo, ON

- Managed sponsorship relations and researched for writing journal articles in order to establish strong PR.
- Team successfully raised **\$ 43,416** (220% of goal) through a Kickstarter campaign to fund prototype pod.

PROJECTS

Caffeine - *Java, XML, Android Studio*

Mar 2017

- **Won 2nd Place** at Start Hacks for a product which prevents drivers from dozing off, reducing accidents.
- Integrated 'Muse: the brain sensing headband', with an **Android App** via Bluetooth.
- Processed real-time **brainwave & accelerometer** data to track head-position and monitor brain activity.

Cryptbot - *Node.js, Firebase, Coinbase API, XE.com API, Azure Portal*

Sept 2017

- Cryptocurrency trading assistant built at Hack the North to provide a layer of abstraction for beginners.
- Deployed a **Node.js** webhook on **MS Azure** Bot Services and channelled it out to Facebook Messenger.
- Integrated APIs to fetch latest news, change home currency, and perform transactions within the bot.

Euphorify - *Node.js, JavaScript, HTML5, CSS3*

Jan 2017

- Engineered a web application at PennApps XV to generate a collage after analysing your Facebook photos.
- Utilized the Facebook Graph API, Microsoft Emotion API and setup **Node** server to process data securely.
- Efficiently sorted the obtained images to generate a collage containing images of a particular emotion.

ReactOnFly - *Java, Python, Flask, Azure*

Nov 2016

- **Chrome extension** with Flask which automatically 'reacts' to Facebook posts by detecting face reaction.
- Integrated the Facebook Graph API and wrote a **Java** script for continuous deletion of redundant data.

OPEN SOURCE CONTRIBUTIONS

github.com/dropbox/dropbox-sdk-js

Jun 2017

- Refactored usage examples for **Dropbox API**'s JavaScript SDK.
- Cleaned up **Git** history, conflicts after collaborating with DropBox.

ACHIEVEMENTS

- **Won 2nd Place for Caffeine at Start Hacks**, a 24-hour hackathon at Wilfrid Laurier University, Waterloo.
- **Top 15% in CodeChef Snackdown 2017**, an annual multi-round global programming tournament.
- **President's Scholarship of Distinction**, awarded for admission averages of greater than 95%.

SKILLS

- **Languages:** C, C++, Node.js, Scheme, Java, Python, Shell, MIPS Assembly, JavaScript, HTML5, CSS3
- **Tools:** Backbone.js MVC, Unix, Git, Android Studio, MongoDB (NoSQL), jQuery, BeautifulSoup, Mongoose