

MICHAEL HE

☎ (778) 319-6115

✉ michael.he2001@gmail.com

in michael-he

GitHub

🌐 michaelhe.tech

EXPERIENCE

Full Stack Developer Intern

Workplace Safety & Insurance Board - Innovation Lab

📅 Winter 2021

📍 Kitchener

- Incoming intern, will develop full-stack R&D projects using technologies such as **React.js**, **MongoDB**, **Firebase**, **Node.js** and **Flask**

Software Developer Intern

Hubdoc - A Division of Xero

📅 May 2020 - August 2020

📍 Toronto

- Developed and maintained web-scraping microservices for **100 000+** clients using **JavaScript**, **Nightmare.js**, **Puppeteer.js**, and **Node.js**
- Improved document-fetching success rate by up to **80%** by refactoring legacy code and handling bot detection
- Implemented intranet features using **Handlebars.js**, **Backbone.js** and **PostgreSQL** to provide control over **AWS ECS** instances
- Wrote unit tests for newly developed features using **Chai** and **Mocha**

PROJECTS

Clothes Classifying Web App

📅 March 2020

- Built a web app that can classify an image input as a clothing category
- Used the **Keras** library alongside **Tensorflow** and **AWS SageMaker** to train a **CNN** model that was then stored in an **AWS S3** Bucket
- Built the backend with **Flask** and the frontend with **HTML/CSS**
- Achieved **90%** accuracy on this multiclass classification problem

ShotSpot - StarterHacks 2020

📅 January 2020

- Created web app that displays the best photography locations
- **Winner** of: Most Promising, Best use of AWS, Best Domain
- Built on a **Node.js** and **Express.js** backend and deployed with **Heroku**
- Wrote a data-scraping **Python** script using **BeautifulSoup** to find optimal locations, scrape sample photos, and upload data as a **JSON** file to an **AWS S3** Bucket

Zenith Studios Android Apps

📅 2015 - Present

- Published an app to predict box office gross using historical data and categorical statistical method with **sub 10%** margin of error
- Developed a UI-modifying application to check for dead pixels and screen defects, received a **4.5/5** rating with **90%+** approval rating over **5000+** downloads
- Created soundboard application with custom **media control system**
- Developed improved alarm clock app using Android **AlarmManager**, **Fragments**, and **Intents**

SKILLS

Languages

Java C/C++ Python JavaScript
HTML/CSS Scala Kotlin R

Frameworks/Technologies

React.js Flask Node.js jQuery
Express.js TensorFlow Keras

Databases

PostgreSQL Firebase MongoDB

Tools

Docker AWS Git/GitHub Linux
Bash Jira Agile/Scrum Jupyter

EDUCATION

Bachelors of Computer Science

University of Waterloo

📅 2019 - 2024

- Nortel Institute Scholarship & President's Scholarship of Distinction
- Average: **92.5%** - Dean's Honours list
- Coursework: Data Structures and Algorithms (Advanced), OOP (Enriched), Sequential Programs (Enriched), Statistics

ACHIEVEMENTS

🏆 **4th Place (2019)**
at UBC Physics Olympics

📖 **TELUS Entrance Scholarship (2019)**
One of 10 recipients across Canada

🎓 **Valedictorian (2019)**
at Moscrop Secondary School

🌟 **Canadian National AP Scholar (2017)**
One of only 11 sophomores to receive to receive this award out of 30 000 Canadian AP Students

🏆 **Top 10 in Province (2017)**
for American Math Contest (AMC 10)

INTERESTS

Digital Art Photography
Dragonboating Basketball