MICHAEL HE

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EXPERIENCE

Hubdoc - Software Engineer May 2020 - September 2020

- Used javascript libraries including nightmare.js and puppeteer.js to develop and maintain web-scraping microservices for 5300+ clients
- Refactored legacy code, totalling **800+ lines** pushed to Github so far
- Built intranet features in **Backbone.js** and **PostgreSQL**

University of Waterloo Developers Club - Team Lead

September 2019 - May 2020

- Taught dozens of beginners how to use version control technologies like **Git** and **Github** and how to program/develop an app in Java
- Led the Android team and created a music recommendation app using the Spotify API

PROJECTS

ShotSpot - StarterHacks 2020 January 2020

- Created web app that displays the best photography locations in any city
- Winner of: Most Promising, Best Domain, Best use of AWS
- Built on a Node.js backend that interfaces with our web-scraping python script, deployed with heroku and AWS

Digit Classifying Web App - Creator

December 2019

- Built a web app that can classify an image input as a numerical digit
- Used the **Keras** library alongside **Tensorflow** to train a **CNN** model
- Used **Matplotlib** to display data
- Built the backend with Flask and the frontend with HTML/CSS
- Achieved 90% accuracy, multiclass classification problem

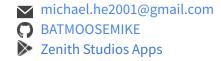
Zenith Studios Android Apps - Founder/Lead Developer 2015 - Present

- Created a mathematical model to predict box office gross using categorical statistical method, under 10% margin of error
- Developed a UI-modifying application for checking dead pixels, receiving a 4.5/5 rating with 90%+ approval rating over 5000+ downloads
- Created soundboard application with custom **media control system**
- Developed alarm clock app that implements Android AlarmManager,
 Fragments, and Intents

EDUCATION

University Of Waterloo - Bachelors of Computer Science
Expected Graduation 2024

- Nortel Institute Scholarship & President's Scholarship of Distinction
- Cumulative Average: 92% Dean's Honours list
- Relevant Courses: CS 146 (Advanced CS), MATH 146 (Advanced Linear Algebra), MATH 147 (Advanced Calculus)



SKILLS

Languages: Java, HTML/CSS, Python, C, Javascript, Kotlin, Scheme (Racket)

Web Technologies: React, Flask, Node.js, jQuery, Nightmare.js, Backbone.js

Machine Learning: TensorFlow, numpy, scikit-learn, Matplotlib, Keras, ImageAl

Systems: Linux (Ubuntu), macOS, PC

Databases: SQL, Firebase

Tools: Android Studio, Git, Bash, VSCode, Atom, Sublime, XCode

AWARDS/CONTESTS

Top 10 in BC for American Math Competition 10 (2017) & Canadian Open Mathematics Contest (2016 & 2017)

4th place at UBC Physics Olympics (2019)

Score of 30 on Canadian Computing Competition ~ **Top 300** in Canada out of **3000** participants (2018)

Top 0.3% score on SAT exam - **1560/1600** (2017)

One of only 11 sophomores to receive Canadian National AP Scholar Award out of 30,000 Canadian AP students (2017)

Moscrop Secondary French Immersion **Valedictorian** (2019)

One of 10 recipients of the TELUS Scholarship (2019)