# **Ahmed Fuad Ali**

### **Skills**

Languages: Java, Python, C, JavaScript, Swift, C++, MATLAB, Verilog/HDL, HTML/CSS, SQL

Tools and Frameworks: Pandas, Bootstrap, TensorFlow, React, Firebase, Node.JS, Android Studio, Git / Version Control

Design: Adobe Photoshop, Adobe Lightroom, Microsoft Office, AutoDesk Inventor, PSpice, Quartus

## **Experience**

Web Developer - Chow-Fraser Lab, McMaster University

Sept 2018 - Present

- Developed a site to aggregate, analyze & visualize data from conservation regions across Canada
- Utilized PHP to collect data and communicate with remote distributed sensors, mapped data using Google Maps API

Software Engineer - Pickup www.pick-up.ca

Apr - Aug 2018

- Student founded ride-share **startup incubated** at McMaster that connects students commuting to school
- Designed a responsive web app in **React**, including a matching algorithm to match riders with drivers
- Collaborated with a team of 4 to coded front-end components in **Grommet** for a dynamic, cross platform experience

Multi-Organ Transplant Researcher - Toronto General Hospital

May - Aug 2017

- Created a machine learning algorithm that uses support vector machines and scikit-learn to classify liver disease
- Employed data normalization procedures to prepare feature set consisting of 10,000+ patients
- <u>Published</u> in the Canadian Liver Journal; An Integrative Meta Analysis of Genomic Data in NASH
- Developed an Android app in Android Studio to remind patients to take their medications

#### **Education**

B.Eng, Electrical and Biomedical Engineering (Co-op) - McMaster University

Expected Apr 2020

- Relevant courses: Data Structures & Algorithms, Discrete Math, Intro to Programming, Calculus, Statistics
- Deans Honor List (2016-2018), Honors Entrance Scholarship, 3.5/4.0 GPA

# **Projects**

Strive - MedHacks 2018 bit.ly/striveJHU

Sept 2018

- 2nd of 200+ teams at Johns Hopkins University
- Utilized computer vision (**Google Vision API**) to extract nutritional info from user uploaded pictures of food

Y-Emote - YHacks 2017 bit.ly/y-emote

Dec 2017

 Coded a web app for sentiment analysis of customer review data using IBM Watson API at Yale University WatchSafe - Hack the Valley bit.ly/watchsafe Feb 2018

- Created a web app that censors inappropriate movie scenes using **SightEngine** at the University of Toronto
- Designed an algorithm to map API data to video content

**readRelax** - DeltaHacks bit.ly/readRelax

Jan 2018

- Devised an algorithm that allows users to use their hand to turn pages in a book, using the LeapMotion controller
- Top 6 Hack of 55+ teams at McMaster's hackathon

# **Extracurriculars**

Welcome Week Planning Committee - McMaster Engineering Society bit.ly/wwcoding

Jan - Sept 2018

- Collaborated with a team of 10 planning 15 events for 1200 incoming engineering students
- Organized a coding challenge sponsored by AMD for 130 students, including writing coding questions & solutions

Youth Rugby Development Intern - Toronto Inner-City Rugby Foundation bit.ly/rug18

Apr 2016 - Aug 2017

• Part of a team of 45 interns bringing the sport of rugby to 20,000+ disadvantaged youth in inner-city Toronto