# **Ahmed Fuad Ali**

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# **Experience**

Web Developer - Chow-Fraser Lab, McMaster University

Sept 2018 - Jan 2019

- Developed a site to aggregate and analyze data from conservation regions across Canada to enable users to selfreport chlorophyll levels in natural water reserves
- Visualized data using D3.js to inform research into water quality, resulting in identification of key conservation zones

#### Software Engineer - Pickup www.pick-up.ca

Apr - Aug 2018

- Ride-share startup incubated at the Forge that connects students commuting to school with drivers
- Engineered a progressive web app using **React** and **Firebase**, redesigned frontend to decrease bounce rate by 20%
- Utilized the Gale-Shapley algorithm to match riders with available drivers, deployed using Firebase Cloud Functions

#### Multi-Organ Transplant Researcher - Toronto General Hospital

May - Aug 2017

- Developed a **machine learning algorithm** in Python that uses **support vector machines** to classify liver disease, resulting in early diagnosis without biopsy or invasive procedures
- Coded a script to normalize 10,000+ patients' data in order to train, validate and evaluate machine learning models
- First author on Meta-Analysis published in the Canadian Liver Journal bit.ly/nashgen

## **Education**

B.Eng, Electrical and Biomedical Engineering Co-op (Level 3) - McMaster University

Expected Apr 2020

- Deans Honor List (2016-2018), Honors Entrance Scholarship (94%), 3.5/4.0 GPA
- Teaching Assistant for Engineering 1P03, evaluating student projects and applying design criteria

## 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

# **Projects**

Toshi - YHack, Yale University bit.ly/toshapp Dec 2018

- Developed an NLP chatbot that makes investment info more accessible for the everyday person
- Utilized Goldman Sachs API and open source info to provide real time stock info and construct a risk model

### Woke - Personal Project

2018

- A social alarm clock for iOS that increases accountability by allowing you to connect with friends waking up early
- Implementing a chat system following MVC principles

WatchSafe - Hack the Valley bit.ly/watchsf Feb 2018

- Created a web app that censors inappropriate movie scenes using SightEngine at the University of Toronto
- Mapped API data to video content to customize censoring allowing for user specifications on "safe" content

#### **Strive -** MedHacks bit.ly/striveJHU

Sept 2018

- 2nd of 200+ teams at Johns Hopkins University
- Built a web app in React to track user nutrition
- Utilized computer vision (Google Vision API) to extract nutritional info from user uploaded pictures of food

# **Extracurriculars**

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

Jan - Sept 2018

- Planned 15 events for 1200+ incoming engineering students, taking into consideration diversity and inclusion
- 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