






# Ahmed Fuad Ali

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## Experience

**Web Developer** - Chow-Fraser Lab, McMaster University Sept 2018 - Jan 2018

- Developed a site to **aggregate** and **analyze** data from conservation regions across Canada to enable users to self-report 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](http://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](http://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](http://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](http://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](http://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](http://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](http://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