# **Ahmed Fuad Ali**

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# **Experience**

Software Engineering Intern - Wealthsimple, Toronto

Sept - Dec 2019

Working on the full-stack using React, Ruby on Rails, and Node.JS

Junior Associate, Software Engineering - Publicis Sapient, Toronto, ON

June - Aug 2019

- Coded responsive, location based front-end component seen by 1.5 million users daily
- Analyzed the performance of \$500 million+ eCommerce site to identify bottlenecks, resulting in faster load times
- Developed a contextualized chatbot by employing the KNN algorithm on click-stream data from Jeep.com

#### Web Developer - Chow-Fraser Lab, McMaster University

Sept - Dec 2018

- 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 Intern - Pickup www.pick-up.ca

Apr - Aug 2018

- 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, using a dataset of eleven **clinical features**
- 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 2021

- Deans Honor List (2016-2018), Honors Entrance Scholarship (94%), 3.4/4.0 GPA
- Teaching Assistant for Engineering 1P03, evaluating student projects and applying design criteria
- Relevant courses: Data Structures and Algorithms, Discrete Math, Statistics, Vector Calculus, Molecular Biology

#### Skills

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

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

# **Projects**

#### **Unmask - Personal Project**

Aug 2019

- Developing a computer vision application using Ruby on Rails to analyze media sentiment based on pictures of faces
- Trained the convolutional neural network model using OpenCV on an EC2 instance and deployed on the cloud

## Strive - MedHacks bit.ly/striveJHU

Sept 2018

- 2nd of 200+ teams at MedHacks, Johns Hopkins University
- Utilized computer vision (**Google Vision API**) to extract nutritional info from user uploaded pictures of food, allowing users to track their calories in a virtual food diary

### 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 allow customized censoring across four different categories: alcohol, nudity, drugs and violence