Fuad **Ali**

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Experience

Software Engineer Intern ⌂ Tesla ⌖ Palo Alto, California   Jan 2020 - Apr 2020
- Writing scalable and performant code to coordinate distributed systems across 3 continents
- Working with functional programming in Scala and distributed system streaming models in Akka and Kafka
- Building key components for battery simulators, microgram dispatch modelling, and algorithmic energy trading

Software Engineer Intern ⌂ Wealthsimple ⌖ Toronto, Canada   Sept 2019 - Dec 2019
- Developed backend to increase speed and reliability of deposits and withdrawals using Ruby on Rails
- Implemented filtering algorithm in Java to sort and visualize transactions between financial institutions
- Architected production-grade email notification service, enabling back-end updates to notify customers

Data Scientist Intern ⌂ Office of the Director of National Intelligence ⌖ Washington, DC   Aug 2019 - Apr 2020
- Researching data compression techniques for high-volume, encrypted DNA data
- Building a software platform to pre-process DNA files, and select optimal compression protocols

Software Development Engineer Intern ⌂ Publicis Sapient ⌖ Toronto, Canada   Jun 2019 - Aug 2019
- Developed a machine learning powered chatbot by employing K-Means Clustering on click-stream data
- Analyzed the performance of $500 million+ eCommerce site to identify bottlenecks, resulting in faster load times

Software Engineer Intern ⌂ Pickup Rideshare ⌖ Hamilton, Canada   Apr 2018 - Aug 2018
- Architected a matching algorithm (Gale-Shapley) to match riders with available drivers
- Engineered a progressive web app using React, redesigned the home page to increase customer retention by 20%

Multi-Organ Transplant Researcher ⌂ Toronto General Hospital ⌖ Toronto, Canada   May 2017 - Aug 2017
- Developed a machine learning algorithm in Python to detect severe liver disease, enabling early life-saving treatment
- Trained and validated machine learning models by normalizing and cleaning patient data
- First author on Meta-Analysis published in the Canadian Liver Journal - bit.ly/nashgen

Education

B.Eng, Electrical & Biomedical Engineering (Co-op) ⌖ McMaster University   Expected Apr 2021
- Deans Honor List (2016-2018), Honors Entrance Scholarship ($2000), 3.4/4.0 GPA
- Relevant courses: Data Structures and Algorithms, Discrete Math, Statistics, Vector Calculus, Molecular Biology

Skills

Languages: Python, Java, Ruby, Scala, SQL, C, C++, JavaScript, Swift, MATLAB, Assembly
Tools and Frameworks: Pandas, AWS, Bootstrap, TensorFlow, Rails, React, Firebase, Node.JS, Git/Version Control

Projects

Unmask ⌂ Personal Project   Aug 2019
- Developed a computer vision application using Ruby on Rails to analyze media sentiment based on pictures of faces
- Trained a facial recognition model using OpenCV on Amazon Web Services and deployed on the cloud

Strive ⌂ MedHacks, Johns Hopkins University bit.ly/striveJHU   Sept 2018
- 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. Placed 2nd of 200+ teams