# PARSA TORABIAN

4A Waterloo Electrical Engineering Co-op Student

torabian.me github.com/parsatorb p2torabi@uwaterloo.ca linkedin.com/in/parsa-torabian

#### WORK EXPERIENCE

#### Data Scientist - IBM

4 months, Jan – Apr 2019 (Toronto)

- Built and tuned NLP models for Watson Financial Services mainly for financial regulations
- Led innovation workshops; taught deep learning and big data concepts to software professionals
- Helped deploy Hadoop and Kubernetes environments

## Junior Data Scientist – Intelligent Mechatronic Systems

4 months, May – Aug 2018 (Waterloo)

- Designed a distributed data processing pipeline using Apache Airflow, Hadoop, Redis, and MongoDB
- Deployed and optimized Java applications processing billions of rows of information

## Software Developer – Bombardier Aerospace

4 months, Sept – Dec 2017 (Toronto)

- Designed and implemented a data pipeline for aggregating and loading aircraft report metadata
- Sped up web application load-up times by up to 1400%
- Presented status of internal tools to management

## Software Developer – Sunnybrook Research Institute 4 months, Jan – Apr 2017 (Toronto)

Redesigned and rebuilt a fully responsive, web-based medical image viewer for clinical testing using LAMP stack

## Software Developer – Holmusk

4 months, May – Aug 2016 (Singapore)

Designed & implemented a NodeJS chatbot and accompanying iOS app from scratch

## iOS Developer – Glocalspace Inc

8 months, May – Dec 2015 (Toronto)

- Used Swift/Objective-C to maintain a commercial POS app; worked primarily on data consistency and integrity
- Designed an SQLite object visualizer tool to help QA testers see data discrepancies

## Engineering Assistant – Brightstar Canada

2 months, June – Aug 2014 (Markham)

Simulated cell-tower emission levels and wrote safety reports citing the results

#### **EDUCATION**

#### **University of Waterloo**

Electrical Engineering, Honours Expected May 2020

#### RESEARCH

## **Computer Vision URA**

Spring 2019: Working with Dr. Bryan Tripp on realistic foveation in CNNs

#### Research Project

SYDE 556: Built a model of macaque directional awareness using a spiking neural network (SNN)

## Signal Processing URA

Fall 2018: Performed signal processing work with Dr. Arash Arami to characterize human motor memory

#### **STRENGTHS**

- C, C++, Java, Scala
- Python: PyTorch, Dask, Keras, Numpy, Pandas, Sklearn
- Neural networks: CNNs. LSTMs, SNNs, Transformers
- MySQL, Redis, Cassandra, MongoDB, Postgres
- Hadoop, Spark, Kafka
- NodeJS, PHP, Flask
- Signal processing, time-series analysis
- Docker, Kubernetes (via IBM Cloud tools)
- Linux & Bash Scripting
- iOS development (Objective-C, Swift)
- Web development (Monolith & Microservice)