Feroze Mohideen

fm87@duke.edu • 914.653.6702 • feroze.xyz • GitHub: ferozemohideen

Education

Duke University

B.S.E in Electrical/Computer Engineering, B.S. Computer Science, Minor Mathematics **Expected May 2020**

- Cum. GPA: 3.98/4.00, Dean's List with Distinction 2016-2019
- Honors: Tau Beta Pi Honor Society President, IEEE Eta Kappa Nu Honor Society Member

Experience

Amazon | Software Development Engineer Intern **Summer 2019**

- Spearheaded campaign to offload vital infrastructure used for detecting fraud in Amazon catalog listings onto AWS cloud services, drastically reducing model evaluation latencies by up to 20%
- Became adept in working with data processing at scale, as well as developing and maintaining production-grade containerized services

AxoSim Technologies | Data Automation Intern **Summer 2018**

- Led project to automate extraction of key parameters from novel nerve-on-a-chip technology, turning a 10-hour manual and subjective process into a 10-minute automatic and objective one
- Collaborated with a Canadian team to incorporate deep learning and neural networks in Python using TensorFlow to automatically segment myelinated axons in TEM images, saving even more time
- Began project using machine learning to predict neuropathy in patients given only electrophysiological waveform data, saving time and money by eliminating the necessity of expensive medical imaging

Huang Acoustofluidics Lab | Software Developer/Research Assistant **Summer 2018 - present**

- Developed and tested a mobile application for iOS to communicate with an HM10 Bluetooth module and read serial data from an Arduino using the CoreBluetooth framework. Mentor: Dr. Tony Huang
- Currently developing iOS application to record counts of different colored microparticles flowing through a narrow channel using the OpenCV library

Projects

Credit Sesame Profit Predictor | 1st Place Winner **Duke Datathon 2018**

Worked on a team of 3 which built a statistical model to predict whether users of the free credit report service on Credit Sesame would convert into profitable customers given information about their profile and 30-day behavior on the website.

Paper Play | Winner, Inequality **HackDuke 2018**

Worked on a team of 4 which developed a mobile application that implements Google Cloud Vision API and Firebase to allow users to simulate playing a piano with just a smartphone and a piece of paper.

Pocket Pills | Finalist **MedHacks 2018**

Worked on a team of 5 which developed a React-Native application that implements Google Cloud Vision API and NLP to extract vital prescription information from medications with the end goal of improving medical adherence.

Independent Study

Spring 2019 — TerrainNet: Large Scale Landsat Image Classification
Designed and tested state of the art deep learning based algorithms for classifying satellite and drone imagery for coastline protective measures.

Fall 2018 — Convolutional Filtering of Footprint Imagery for Efficient Classification of Endangered Species
Designed a system to separate animal paw prints from noise in an image and started a registration system to map individuals to their footprints.

Fall 2018 — MLE for Classification of Spoken Digits
Explored a generative model for accurate recognition of spoken Arabic digits.

Skills

Programming: Python (PyTorch, Keras), Java, C, JavaScript, R
Cloud Technologies: GCP and AWS services

Highlighted Course Work

Machine Learning – Intro PhD (CS 671)
Computer Vision (CS 527)
Design + Analysis of Algorithms (CS 330)
Elements of Machine Learning (CS 371)
Appl. Prob. For Stat. Learning (ECE 495)
Databases (CS 316)