## SNEHA NAGPAUL

# Washington Metropolitan Area, USA | snagpaul@gmu.edu

#### **PROFILE**

- Versatile background with thesis based Master's degree in Artificial Intelligence. Interested in Deep Learning for Natural Language Processing, Computer Vision and Recommender Systems.
- Proficient in algorithm design and turning ideas into code in a dynamic environment.
- Looking to formalize real world problems for solving with latest technology and tools in a production setting.
- Care about work place morale, general sense of vision in the company at all levels and an environment that celebrates diversity in academic and cultural backgrounds.

## **EDUCATION**

Master of Science - Computer Science - George Mason University, Fairfax, VA (Current GPA: 3.96) expected May 2018

Bachelor of Science - Computer Science - Delhi University, India

May 2010

# **SKILLS**

Languages Python, SQL, R, C, C++, Java

Libraries Keras, TensorFlow, PyTorch, Theano, Pandas, Scikit-Learn, NumPy

Tools Tableau, Git, Jupyter Notebooks, PyCharm

Operating Systems Unix/Linux, MacOS, Windows

Relevant Coursework Data Mining for Multimedia Data, Algorithm Design and Analysis, Object Oriented Programming

Mining Massive Datasets with Map Reduce and Spark

### **TECHNICAL WORK EXPERIENCE**

## Data Science Intern - All Traffic Solutions, Herndon, VA

July 2017 - August 2017

- Deployed code in Apache Hadoop and Apache Spark for extract, transform and load (ETL) related tasks in the IOT pipeline.
- Created an internal software usage report as a Tableau Story to discover opportunities for increasing revenue.

## Graduate Research Assistant - Crime Prediction George Mason University, Fairfax, VA

January 2017 - June 2017

- Mined data sets consisting of raw unstructured news articles and cross referenced findings with police data.
- Created the framework for a crime recommendation system for finding actionable locations in Bogota, Colombia to send to the local law enforcement.

# **ACADEMIC PROJECTS**

# Geographic Information Retrieval: Deep Learning, Natural Language Processing

Fall 2017

- Found novel neural network architectures for placing language geographically for use in disaster response and recommender systems.
- Successfully used deep learning architectures to find high level language patterns without feature engineering and minimal preprocessing of data.

### Cervix Classification: Deep Learning, Computer Vision

Fall 2016

- Practically applied concepts of Transfer Learning in a Deep Learning context for image classification to identify type of cervix for subsequent cancer diagnosis.
- Reached high classification accuracy using architectures like Convolutional Neural Networks and ResNets with Deep Learning libraries such as Keras, Theano and Tensor Flow in Python3 which are optimized for running on GPU CUDA cores.

### EXTRA CURRICULAR INVOLVEMENT

- Volunteer in the MentorWorks program for Fairfax County Public School
- Student Organizations at GMU: American Statistical Association, Women of Color in STEM, Society of Women Engineers