SNEHA NAGPAUL
Fairfax, VA
snehanagpaul@me.com | 571-365-6300 | sneha.co

PROFILE

I am an MS in Computer Science student concentrating on Artificial Intelligence and Machine Learning, looking for a full time data science position. My current research is focused on Artificial Neural Networks as applied to Natural Language Processing. My goal is to translate academic knowledge into production code while finding innovative solutions for data related problems. Having a multicultural and multidisciplinary background has not only aided me to be highly adaptable and dynamic but has also led to gaining superior communication skills. I deeply care about the representation of Women in Technology and the ethical implications of Artificial Intelligence. As an international student, I have work authorization for 29 months, following which I would require a visa sponsorship. Additionally, I am willing to relocate anywhere in the United States for the right team.

EDUCATION

Master of Science - Computer Science - George Mason University-Fairfax, VA -(Current GPA: 4.0) expected December 2017
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
Data Mining Methods	Recommender Systems, Regression, Classification, Clustering, Natural Language Processing, Computer Vision, Time Series
Tools	Tableau, Git, Jupyter Notebooks, PyCharm
Operating Systems	Unix/Linux, MacOS, Windows

TECHNICAL WORK EXPERIENCE

Data Science Intern - All Traffic Solutions, Herndon, VA July 2017 - August 2017

- Used Apache Hadoop and Apache Spark for extract, transform and load related tasks in the IOT pipeline.
- Developed online learning models for Traffic Engineers using LSTMs.
- Created an internal software usage report as a Tableau Story and found opportunities for increasing revenue.

Graduate Research Assistant - George Mason University, Fairfax, VA January 2017 - June 2017

- Mined massive data sets consisting of raw unstructured 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 (2017)

- Discovering efficient deep learning architectures that use unstructured text to predict latitude/longitude.
- Explored RNNs (LSTMs) by using word embeddings from pre-trained models like GloVe and Word2vec and adapting them to the GIR use case by Transfer Learning in Keras, Tensorflow and PyTorch.

Cervix Classification: Deep Learning, Computer Vision (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.

Loss Prediction for Insurance: Regression Analysis (2016)

- Analyzed a mix of categorical and continuous variables to get real valued predictions for a loss generated from a skewed distribution based on experience (claims) data.
- Regression techniques such as boosted trees and random forest were employed after careful feature selection and feature engineering.

EXTRA CURRICULAR ACTIVITIES AND CAUSES

Women of Color in STEM(GMU) Member since 2015
Society of Women Engineers(GMU) Member since 2015
American Statistical Association(GMU chapter) Former Secretary and Member since 2015