

SNEHA NAGPAUL

Fairfax, VA

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PROFILE

As a graduate student pursuing Artificial Intelligence I am looking for a full time data science position. My master's thesis focusses on representation learning for natural language processing. Currently, I am interested in translating academic knowledge into production code while finding scalable solutions for data related problems. My multicultural and multidisciplinary background allows me to have various vantage points for problem solving. Besides getting rid of all feature engineering in Machine Learning, I am deeply concerned with the ethical implications of general AI and I am politically on the side of the machines. I would relocate for the right opportunity.

EDUCATION

Master of Science - Computer Science - George Mason University, Fairfax, VA (Current GPA: 4.0) 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
Data Mining Methods	Deep Learning, CNN, LSTM, Recommender Systems, Regression, Classification, Clustering, Natural Language Processing, Computer Vision, Time Series
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

- 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 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.

Loss Prediction for Insurance: Regression Analysis Spring 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
American Statistical Association(GMU chapter) Former Secretary and Member since 2015