SNEHA NAGPAUL
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PROFILE
Self driven entrepreneurial software engineer and data scientist with a background in applied financial statistics, looking to move fast and make an impact.

EDUCATION
Master of Science (Thesis Based) - Computer Science - George Mason University (GPA: **3.96**)   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
Natural Languages	English (fluent) , Hindi (fluent) , French (working)
Course Work	Formal Logic and Discrete Mathematics, Systems Programming, Analysis of Algorithms 1& 2, Data Mining, Time Series Mining Object Oriented Software Specifications in Java, User Interface Design

TECHNICAL WORK EXPERIENCE
Data Science Intern - All Traffic Solutions, Herndon, VA   July 2017 - August 2017
Developed time series forecasting models for traffic engineers using Big Data pipelines constructed with Apache Spark. Increased revenue by working with Sales and Marketing teams by developing a user interface report by analyzing client activity on the internal software using tools like Tableau and visualization libraries in Python 3 with Jupyter Notebooks.

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 a framework for local law enforcement for recommending crime hotspots using spatio temporal analysis.

Graduate Teaching Assistant - George Mason University, Fairfax, VA   September 2016 - December 2016
Assisted with evaluating exams, quizzes and assignments for a formal logic graduate level class at GMU. Helped demystify elements of discrete mathematics and foundational concepts to incoming graduate students.

Founder - actuarialscience.in, New Delhi, India   January 2013- August 2015
Managed a team that covered important technical Actuarial Science conferences as part of a survey on the latest developments in the Indian insurance landscape. The non-profit organization reported on the demographics of actuaries in India with data collected from the Indian Actuarial Governing body to predict the future actuarial requirements and affect governmental policy development.

PUBLICATIONS AND ACADEMIC PROJECTS
From Language to Location using Multiple Instance Neural Networks - SBP, Conference Proceedings, Washington DC (2018)
Improved prior semi supervised learning approaches by eliminating use of kernels with neural networks for multiple instance learning. Applied the novel method to natural language processing for finding the geographic location of short text data using semi-labelled data.

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.

Sentiment Analysis for Text Reviews: Natural Language Processing (2016)
After preprocessing raw text data and employing dimensionality reduction techniques, data were classified and positive or negative using the K-nearest Neighbors classification algorithm.

Recommendation System for Movie Rating Prediction: Collaborative Filtering (2016)
Given a set of ratings and reviews, a collaborative filtering technique was devised following feature reduction using Truncated SVDs from Scikit-Learn. Content based approaches were used to augment predictions of movie ratings given a user.

AFFILIATIONS AND EXTRA CURRICULAR ACTIVITIES
Institute of Actuaries, United Kingdom	Since 2011
Hack4Change - Women's Liberation in rural India	Since 2012
Society of Women Engineers(GMU)	Since 2015
Women Who Code, DC	Since 2017

LINKS
Github	https://github.com/nagpaul
LinkedIn	https://www.linkedin.com/in/snehanagpaul
Twitter	https://twitter.com/snagpaul