Hasan Khan

MSCS Student @ NYU Courant

hk3550@nyu.edu
+1-804-980-5375
theotherkhan.github.io

Professional Experience

NLP Engineer Intern – Healthcare Risk Advisors
6/2022 – 1/2023

Implemented NLP pipelines utilizing large language models (LLMs) for text classification tasks on medical claims data. Explored supplementary training techniques for LLMs. Modeled using PySpark and SparkNLP in Databricks.

Data Scientist – LMI, U.S Federal Consulting
8/2018 – 5/2021

Provided advanced analytics and software development services for federal agencies, with a focus on building machine learning capabilities. Highlighted work:

Predictive Modeling - Built supervised regression models to optimize rare inventory lead time estimation for a U.S Defense Agency. Random forests trained on 10+ years of inventory procurement data resulted in a 37% improvement of lead time predictions for rare procurements over baseline metrics, with an annual expected savings of $45M on inventory holding costs.

Application Development - Designed and developed a survey analytics web application for NASA Human Resources. Utilized BERT language models for sentiment analysis and topic modeling on free response survey comments. Integrated models into Python Dash webapp and visualized sentiment and topic classification outputs. Deployed webapp on Shiny.

Research Assistant – Meliza Lab, UVA Psychology Department
5/2016 – 8/2018

Modeled neurons in Python to simulate auditory cognition processes in Zebra Finches. Coded Recursive Bayesian Filters for biophysical parameter estimation of High Vocal Center neurons. Classified auditory neurons into subtypes based on ion channel makeup.

Education

New York Universty – M.S Computer Science
9/2021 – Current

GPA: 3.33

University of Virginia – B.A Computer Science, B.A Cognitive Science
8/2014 – 5/2018

GPA: 3.34

Proficiencies

Languages: Python, Java, C++, SQL, HTML, Ada
Libraries: pandas, sklearn, keras, PyTorch, PySpark, MLflow, SparkNLP
Platforms: AWS, Git, Docker, Databricks
Specialized Courses: AI, ML, NLP, ML in Healthcare, Distributed Systems
Clearances: US Federal - Secret

Additional Roles

Cofounder – Alif Seh Yeh, Urdu Language Education Platform	5/2019 – Current
Editor & Columnist – The Cavalier Daily, Opinion Section	11/2014 – 1/2017
Teaching Assistant – Introduction to Computer Programming	8/2017 – 5/2018
Vice President & Cofounder – UVA Machine Learning Club	8/2016 – 5/2018