Jackson S. Duke

(919) 937-0509
jacksonsduke@gmail.com
linkedin.com/in/jacksonduke/
jsduke.streamlit.app

SUMMARY

Data scientist and master's student at the Georgia Institute of Technology, graduating in December 2023. Three years' work experience in cloud migration and machine learning. Project experience in NLP, LLMs, ML, and Regression. Seeking to further my career in data science with an inclusive, innovative, and collaborative company.

WORK EXPERIENCE

Senior Consultant, Data Analytics   McLean, VA
EY
October 2019 – May 2022

- Enabled the creation of a cloud-based financial reporting platform handling 90M+ mortgage loans by gathering sourcing, calculation, modeling, and testing requirements.
- Converted legacy code across 100+ disparate SAS, Python, and R files into centralized requirements source to target mapping (STTM) for reporting automation.
- Conducted gap analysis on 10+ regulatory processes for more efficient ETL processing and more informed capital management decision-making.
- Validated the platform output of 120+ regulatory line items using robust SQL scripts for Finance director signoff.
- Led training and hands-on working sessions for over 50 client stakeholders on the capabilities and use cases of Dremio, a self-service Data Virtualization tool.
- Utilized machine learning and data mining in Python to flag incongruous data from upstream data providers servicing 100k+ mortgage loans across 11 monthly files.
- Aided in the taxonomy of 1k+ attributes for ESG Arena, a cloud-enabled asset management tool enabling clients to track environmental, social, and governance (ESG) scores and engage in sustainable business transformation.

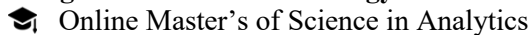**Founder and Videographer**   Chapel Hill, NC
Milestone Media Group
August 2016 – May 2020

- Produced and edited memorable wedding highlight films wedding highlight films for over 20 clients, achieving over $35k in revenue through effective client management.
- Created visually appealing brand assets, including a custom logos, website, and end slates to enhance company branding.
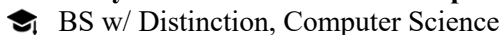
EDUCATION

Georgia Institute of Technology
Online Master's of Science in Analytics
December 2023
GPA 4.00 • Dean's List 2022

University of North Carolina at Chapel Hill
BS w/ Distinction, Computer Science
BA w/ Distinction, Chinese
May 2019
GPA 3.74 • Dean's List 2015 – 2019

PROJECTS

ESG Certification Recommender System
[LLM Generation] [NLP Encoder-Decoder]
t.ly/JgTsI

Built a Python application to recommend sustainability certifications for IT products. The application takes in product data and enriches the dataset with feature definitions from LLaMA and Cohere LLMs. Each product is then assessed by GPT-3.5 and Cohere on compliance with environmental, social, and governance (ESG) certifications.

Predicting the 2022 FIFA World Cup
[ML Classification] [Data Scraping]
t.ly/j-FiT

Scraped 15,000+ player ratings and 860 national team soccer match statistics from 2015 – 2022 to train five ML classification models up to 70% test accuracy aiming to predict the 2022 FIFA World Cup matches.

Meta Ad Impact on 2020 Elections
[Linear Regression]
t.ly/8mm0N

Leveraged the Meta Ad Library API to fit multiple linear regression models, aiming to determine if a 2020 presidential candidate's Meta ad spend led to an increase in votes.

CERTIFICATIONS

IBM Data Science Professional • July 2021

TECHNICAL SKILLS

Languages:

[Python] [SQL] [R]

Technologies:

[Amazon Redshift] [Hadoop] [Spark] [Dremio] [D3] [Talend] [Tableau]

Competencies:

[Data Analysis] [Machine Learning] [Natural Language Processing] [ETLs] [Data Virtualization] [Data Visualization] [Regression] [Recommender Systems]