

Jackson Sanders Duke

☎ (919) 937-0509 | ✉ jacksonsduke@gmail.com | [in linkedin.com/in/jacksonduke/](https://www.linkedin.com/in/jacksonduke/) | 🌐 jsduke.streamlit.app

SUMMARY

Data scientist and master's graduate from Georgia Tech. 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.

EDUCATION

Georgia Institute of Technology | GPA 4.00/4.00 📅 January 2022 – December 2023
🎓 MS in Analytics | Dean's List 2022 – 2023

University of North Carolina at Chapel Hill | GPA 3.75/4.00 📅 August 2015 – May 2019
🎓 BS in Computer Science | Dean's List 2015 – 2019
🎓 BA in Chinese | Dean's List 2015 – 2019

WORK EXPERIENCE

EY | Senior Technical Consultant, Data and Analytics | *McLean, VA* 📅 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 in compliance with government capital standards
- Utilized machine learning and data mining in Python to flag incongruous data from upstream providers servicing 100k+ mortgage loans across 11 monthly files, streamlining stakeholder review
- 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 with respect to new FHFA reporting standards for more efficient ETL processing and more informed capital management strategy
- Validated 120+ regulatory line items using robust SQL scripts over 90M+ rows for Finance director signoff
- Led training and working sessions for over 50 client stakeholders on the capabilities and use cases of Dremio, a self-service Data Virtualization tool which supports ad-hoc data analysis for business intelligence
- Provided the taxonomy for 1k+ data 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

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

- Produced and edited 20+ memorable wedding highlight films for clients
- Generated \$35k+ in revenue through effective client management
- Created visually appealing brand assets including custom logos, websites, and end slates to enhance company branding

PROJECTS

ESG Certification Recommender System | *LLM Generation, NLP Encoder-Decoder* 🌐 t.ly/JgTsl

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: Machine Learning, Natural Language Processing, ETLs, Data Virtualization, Data Visualization