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Rashaad Ratliff-Brown

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Education

Duke University — Durham, NC
Masters of Science (MS) - Interdisciplinary Data Science — MAY 2023

- **Relevant Coursework:** Modeling and Representation of Data, Practicing Data Science, Natural Language Processing, Data Engineering Systems, Unifying Data Science, Machine Learning, Data Analysis in Cloud, Mobile Application Development, Financial Algorithms

University of North Carolina at Charlotte — Charlotte, NC
Bachelor of Science (BS) - Computer Science — DEC 2020

Skills

Programming Languages	Python, R(Dplyr, Tidyr, Knittr), Bash, Javascript, Java, SQL, C, C++, HTML, CSS, Markdown, Swift
Database	MySQL, PostgreSQL, Tableau, Databricks, Dask
Big Data & Visualization	Seaborn, Matplotlib, Pandas, GGplot2, Plotly, Altair
Machine Learning Framework	Scikit-learn, Keras, NLTK, TensorFlow, KNN, KMeans, Logistic Regression
Data Science & Misc. Technologies	A/B testing, ETL, Data Science Pipeline (Cleansing, Wrangling, Visualization, Modeling, Interpretation), Statistics, Time Series, Experimental Design, Hypothesis Testing, APIs, Git, CI/CD Workflows, SDKs, NumPy, Pandas, SciPy

Technical Experience

DATA SCIENCE INTERN — **Aug 2022 — May 2023**
Arria Boost — *Seattle, WA*

- Engineered a probabilistic machine learning model for NCAA Division I soccer team rankings, achieving predictive accuracy for match outcomes above the professional soccer baseline by 5
- Enhanced model performance over sequential seasons, validating the model's capability to adapt and improve through continuous learning.
- Designed a dynamic, user-interactive dashboard providing real-time, in-game feature-based analytics, enabling users to make informed decisions with a holistic view of team performance.
- Successfully incorporated direct modeling of match draws and tournament projections, demonstrating a strong correlation with expert rankings and achieving an 83.3% accuracy rate in men's team field predictions.
- Constructed a unique adjusted margin of victory metric, contributing to a system that outperforms the FIFA ranking system in predictive accuracy and score predictions.
- Feature Engineering, Statistical Machine Learning Modeling, Data Visualization and Pipeline Automation.

DATA SCIENCE/DATA ENGINEERING INTERN — **May 2022 — Aug 2022**
Duke Data Plus — *Durham, NC*

- Collaborated with a team to consolidate historical data of Plus Programs, enhancing data-driven decision-making processes.
- Analyzed longitudinal data spanning 8 years from multiple Plus Programs, including Data+, Code+, and CS+, to derive actionable insights on student engagement and program efficacy.
- Spearheaded the development of a unified data structure, optimizing data storage and retrieval for robust reporting capabilities.
- Designed and implemented a comprehensive dashboard to visualize participant data, facilitating the evaluation of program impact and strategic planning.
- Enhanced text analysis capabilities by deploying advanced machine learning algorithms from the Hugging Face library, achieving nuanced insights from user-uploaded content.
- Proposed data-informed recommendations to refine program offerings, which served as a basis for initiating targeted alumni outreach programs and improving student retention strategies.

ANALYTICS INTERN — **Aug 2020 — Aug 2021**
Coolvio — *Charlotte, NC*

- Collaborated with the data analytics team to analyze large datasets using SQL and Python, uncovering insights that drove strategic decision-making.
- Spearheaded the creation of a predictive model using Python and R, which forecasted user behavior trends, aiding the product team in enhancing app features.
- Assisted in the development and deployment of data dashboards using Tableau, leading to improved real-time reporting and KPI tracking for various departments.
- Conducted A/B testing on the company's website, which resulted in a 7% increase in user engagement and a 10% rise in conversion rates.