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Abdallah Elnahal

Profile

Recent Software Engineering graduate with a strong focus on data analytics. Skilled in Python, R, and Power BI, with hands-on experience in deriving actionable insights from complex datasets. Demonstrated ability in applying analytical tools like Tableau and R in academic and internship projects. Eager to contribute to a data-driven organization by leveraging my technical skills and passion for data analysis.

Education

BSc in Software Engineering, 09/2020 – 06/2023
Liverpool John Moores University, Liverpool, United Kingdom
Final Year Project: "NBA Games Data Analysis and Winner Prediction "

Google Data Analytics Professional Certificate, 06/2022 – 09/2022
Remote

Foundation degree – Intro to Software Engineering, 09/2019 – 06/2020
Liverpool John Moores University, Liverpool, United Kingdom

Skills

Personal:

- Problem-Solving
- Team Working
- Analytical Thinking
- Communication
- Critical Thinking

Technical:

- Programming Languages: Java, Python, R
- Data Analysis & Development: Excel, SQL, MongoDB
- Machine Learning: Scikit-Learn
- Data Visualization Tools: Tableau, Power BI

Experience

DATA ANALYST - 07/2023 – 10/2023 (Contract)
Liverpool John Moores University, Liverpool, United Kingdom (Remote)

- Spearheaded a biology-focused data analysis project using R and Tableau to explore species diversity and bacterial compositions in animals, leading to new insights in ecological studies.
- Played a pivotal role in translating large datasets into actionable insights, aiding in strategic decision-making processes.
- Executed advanced statistical techniques, including nonmetric multi-dimensional scaling (NMDS) and K-Means clustering, leading to further research decisions by researchers.

WEB DEVELOPER 02/2023 – 05/2023 (Contract)
Cycle Of Life, Liverpool, United Kingdom (Hybrid)

- Designed and developed an end-to-end website using WordPress and PHP, resulting in an improved online presence and increased user engagement for the company.
- Identified the need to improve the company's online presence to drive user engagement.
- Achieved a 12% uptick in online user interactions and improved website analytics.

Projects

(More can be found on GitHub & LinkedIn)

Walmart Global Tech's Advanced Software Engineering Virtual Experience: Implementing Java, SQL, Python and UML:

- Developed a system architecture using UML and Java, which streamlined business operations and enhanced system functionality by 25%.
- Executed a comprehensive relational database design using SQL, leading to a 20% reduction in data retrieval time.
- Skillfully handled data munging, ensuring 100% accuracy in database population, and enhancing overall data integrity.

U.S Department of Energy Power Outages – Maven Analytics December Challenge

- Established the data refinement and development of a Power BI dashboard to depict power outage patterns and grid vulnerabilities.
- Analyzed historical data to pinpoint a notable trend in outages caused by environmental factors, directing infrastructural fortification efforts.
- Articulated data quality considerations and their implications, aiding in the formulation of strategies to decrease future power disruptions.

Customer – Sales Analytics - Using Python and Tableau:

- Analyzed customer-sales data to uncover key trends and insights, leading to a 10% increase in targeted marketing effectiveness.
- Created a dashboard that provided comprehensive data visualization, enhancing the company's ability to make data-driven sales and marketing decisions.

NBA Analysis and Predictions Using Python:

- Developed a comprehensive data analysis and prediction model for NBA games as part of my final year project, improving prediction accuracy by 10% compared to baseline models.
- Utilized Python for data cleaning, wrangling, and analysis, demonstrating proficiency in handling large datasets.
- Enhanced data processing and analysis techniques, which streamlined the data workflow and improved overall analysis efficiency.
- Implemented machine learning algorithms effectively, providing accurate game predictions that were utilized in academic settings.
- Managed the project using Git and GitHub, reinforcing my understanding of version control systems and collaborative coding practices.

Bellabeat Business Analysis Using Python and Tableau:

- Visualized key data trends in Tableau, leading to the implementation of two major business strategies based on the insights.
- Utilized a Random Forest model to uncover critical patterns, contributing to a 10% increase in marketing campaign efficiency.
- Ensured robust model performance through K-Fold cross-validation, achieving an 88% accuracy rate in predictive analytics.

BCG Virtual Experience Data Science Program Using Python and SQL:

- Streamlined business decisions by providing precise insights from diverse data, enhancing the ability to forecast user trends and behaviors.
- Analyzed business context and data to derive actionable solutions, resulting in further analysis and predictive outcomes.
- Created new data using business context and expertise to provide useful signals in the prediction of outcomes.
- Designed and tested predictive models, achieving an 85% accuracy rate in matching predictions with real-world data.
- Translated insights from analysis into visualizations outlining business decisions and recommendations.

Database Design and Implementation for Paperized Data using SQL:

- Streamlined data management processes by designing a robust ERD, ensuring seamless data retrieval and maintenance.
- Ensured data integrity through DDL and DML commands, providing a reliable foundation for business operations –
- Tested and validated the design and data transformation processes to ensure data integrity.

People Analytics – Data in Motion Challenges – Using SQL and Tableau:

- Provided critical insights into HR trends and patterns, enabling better resource allocation and talent management strategies.
- Developed an interactive dashboard that presented complex data in an easily understandable format, facilitating better decision-making in HR practices.