Brian Njuguna

Data Scientist

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I am a skilled Data Scientist driven by a passion for uncovering insights from complex data. With expertise in statistical analysis, interpretation, and presentation, I bring a focused and detail-oriented approach to data analysis and data science. My extensive knowledge of statistical concepts, machine learning algorithms, and models, combined with advanced proficiency in various software packages, equips me to tackle analytical challenges with ease. With my excellent communication skills, I excel at conveying my findings clearly and concisely to diverse audiences.

Work History

2023-05 - present

Data Scientist Intern

Candlesticks Investments Group, Nairobi

Worked as a Data Science Intern, specializing in various aspects of data management and analysis. Achievements:

- Data Mining and Cleaning: Proficient in extracting data from various sources, such as PDFs (e.g., bank statements), and performing thorough data cleaning to ensure accuracy and consistency, using R and Python.
- Data Analysis: Applied advanced analytical techniques to gain valuable insights from complex datasets. Utilized statistical methods, predictive modeling, and machine learning algorithms to uncover patterns, trends, and correlations within the data, using R and Python.
- Data Visualization: Created compelling visual representations of data using interactive dashboards, charts, and graphs.
- Shiny Apps: Created R and Python shiny apps. FastAPI a web framework for building APIs with Python, served as the hosting platform for Python shiny apps.

2023-01 - 2023-03

Attaché

Kenya Power and Lighting Company, Nairobi

As an attaché in the Business Strategy Division at Kenya Power, I had the opportunity to work across multiple departments, including Enterprise Risk Management, Project Management Office, and Business Planning.
Accomplishments:

- Carried out risk assessments identifying potential risks that may impact the organization's operation
- Updated and created risk registers for various departments and divisions in KPLC
- Communicated risk information to relevant stakeholders and collaborated with teams to develop and implement risk mitigation plans
- Conducted data analysis and research to identify emerging risks and trends
- Conducted data analysis to support business planning
- Provided actionable insights to support decision-making processes for the department and the organization
- Conducted data analysis on customer classifications to understand customer segmentation and behavior
- Utilized statistical methods and tools to analyze and interpret customer data
- Provided insights on customer behavior and preferences to inform business strategies and initiatives
- Proposed a project on refining customer care to improve efficiency and effectiveness of KPLC's customer service operations
- Extraction of data using Microsoft Excel.

Education

2023-05 - present	**Software Engineering**	
	ALX Africa	
2018-09 - 2022-12	**Bachelor of Science in Statistics**	
	Egerton University, Nakuru	
2014-01 - 2017-12	**Kenya Certificate of Secondary School Education**	
	Gaichanjiru High School, Murang'a	

Skills

- R programming Language for statistical analysis (3 years of experience)
- C++ Programming Language
- Python for Data Science
- SPSS/STATA software
- Microsoft Power BI and Excel

Projects

StockDistFit Package

Developed a package in R that includes functions to fit probability distributions to stock market data and determine the best distribution for a given asset. The package is available on The Comprehensive R ArchiveNetwork (CRAN)

Stock Return Prediction

Developed and implemented a project to predict the direction of stock returns (up or down) using machine learning algorithms, including Lasso, Ridge, and Extreme Gradient Boosting models. Conducted datapreprocessing, feature engineering, and model tuning to optimize predictive performance. Achieved anaccuracy of 60%.

Sentiment Analysis

Conducted research on sentiment analysis of the novel "Wreck of the Titan", utilizing various lexicons in R to analyze and classify the emotions expressed in the text. The study aimed to understand the overall sentiment and themes of the novel and provide insights into the author's intentions and underlying messages.

Kenya Demography App

Developed a Shiny web application in R to visualize Kenya's population trends based on the 2019 Kenya National Wide Census data and other demographic characteristics dating back to 1950. The interactive app utilized line charts and choropleth map to showcase population growth rates, fertility rate, and other demographic characteristics over time.

Courses

2023-06	**Python for Data Science, AI & Development**
2023-05	**Mastering Software Development in R**
2021-03	**SPSS Software**

Referees

Evans Chumo

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