Kavindu Yasara

Portfolio

About Me

I am a final year undergraduate in Applied Data Science Communication driven by a strong academic foundation and a passion for learning. A self-motivated, experienced individual with excellent communication skills, I thrive in collaborative environments and am eager to gain hands-on experience. Responsible and dedicated, I strive to fulfill my assigned duties with competence and commitment while continuously expanding my knowledge and skills.

Education

General Sir John Kotelawala Defense University, BSc in Applied Data Science

Jan 2023- Present

Communication

Rahula College, Matara, Advanced Level British Council, Matara, Level 3

2019-2022

2018

Extracurricular Activities

- WUSHU Captaincy, Rahula College, Matara (2020-2021)
- Vice-President, AI and Data Science Club, General Sir John Kotelawala Defence University (2024-2025)

Skills

Python SQL

Power BI

R Programming

Excel

Academic Research _____

Crime Hotspot Prediction Using Machine Learning for Proactive Policing at LSOA Level

2025

Siyambalapitiya, A., Yasara, K., Damruwan, U., Bandara, K., & Marasinghe, T. General Sir John Kotelawala Defense University

Projects _____

Heart Disease Prediction Using K-Nearest Neighbors (KNN)

- Tools used: R, Tidyverse, Caret, ggplot2
- Methods Used: Data Preprocessing, Standardization, KNN, Confusion Matrix
- Description: Built a KNN classification model to predict heart disease based on patient health indicators such as age, cholesterol, and blood pressure. Performed data pre-processing and standardization and trained the model on a 70:30 split. Achieved 61.73

Power BI Dashboard - Modern Summer Olympics (2000-2016)

- · Tools Used: Power BI, SQL
- Methods Used: Data Cleaning, Trend Analysis, Visualization
- Description: Designed an interactive Power BI dashboard to visualize Olympic trends from 2000 to 2016. Analyzed medal distribution, gender representation, and top-

performing countries. Identified key insights such as increased female participation and the dominance of the U.S. in medal counts

Interactive Olympic Games Analysis (1948–2016)

- Tools Used: Power BI Report Builder, SQL
- Methods Used: Data Aggregation, Trend Analysis, Interactive Filtering
- Description: Conducted historical analysis of Olympic Games (1948–2016), focusing on athlete participation and geopolitical trends. Explored the effects of Cold War tensions and Olympic boycotts. Provided policy suggestions for inclusivity, sustainability, and neutrality in future games

Child Well-Being Analysis Using Young Lives Data

- · Tools Used: Power BI, SQL Server
- Methods Used: Data Cleaning, Statistical Analysis, Data Visualization
- Description: Analyzed child poverty and well-being indicators in Ethiopia and India using the Young Lives dataset. Examined metrics such as education, health, and economic status. Developed an interactive Power BI dashboard to assist policymakers in targeting child poverty reduction.

Greater Manchester Domestic Energy Performance Analyzer

- Tools Used: Microsoft Azure, Power BI, SQL Server
- Methods Used: Data Cleaning and Transformation, Energy Efficiency Analysis, Visualization
- Description: Created an energy performance analysis tool using EPC data (2008–2024) for Greater Manchester. Explored energy efficiency across housing types and regions. Developed insights for urban planning, real estate, and energy policy improvements.

PolicyCraft Document Summarizer and Policy Generator Web App

- Tools Used: Flask, Gemini AI, Python
- Methods Used: Natural Language Processing, Text Summarization, Web Development
- Description: Developed a web-based AI tool for summarizing policy documents using Flask and Gemini AI. Integrated NLP techniques for efficient document processing and summarization. Enhanced policy research workflow by enabling fast, reliable content summarization.

Association Rules Mining on Market Basket Dataset

- Tools Used: R, Power BI
- Methods Used: Association Rules Mining, Data Preprocessing, Visualization
- Description: Employed the Apriori algorithm to identify frequent product combinations in market basket data. Generated actionable insights into customer purchasing behavior. Created a Power BI dashboard to visualize rule strength, lift, and product associations.

Professional References

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