Keerthana Kola

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Objective: Detail-oriented Business Intelligence Analyst with expertise in SQL, Tableau, Power BI, Excel and data visualization. Passionate about transforming complex data into actionable insights to drive strategic decision-making. Seeking to leverage my analytical and problem-solving skills at the organization to build impactful dashboards and optimize data-driven decision-making.

Education:

Master's in Information Technology — December 2024

- University of Massachusetts Boston | Boston, United States | GPA 4.0/4.0

Bachelor of Technology in Electronics and Computer Engineering — July 2022

- Sreenidhi Institute of Science and Technology | Hyderabad, India | GPA 3.1/4.0

Skills:

Programming Skills : MS-Excel(Pivot tables, VLOOKUPs, Macros), SQL Server, PostgreSQL, MySQL, Python (TensorFlow, NumPy, Pandas, Matplotlib, Scikit-learn, Seaborn, Time series Analysis), PostgreSQL, PySpark, Web Scraping, Geo-Spatial Data Analysis

Tools: Microsoft Office(Project, Word, Excel, PowerPoint, Visio, Tableau, ETL pipelines, AZURE, Power BI, Figma

Soft Skills: Problem-solving, analytical thinking, effective communication, team work

Projects:

Healthcare Data Analysis: Body Mass Index Visualization:

- Accomplished the identification of global healthcare negligence as measured by the rising prevalence of extreme BMI categories (underweight <18.5 and obesity >=30) from 1990–2022, by analyzing NCD data collected by healthcare scientists to highlight concerning trends in nutrition and health disparities which need urgent care.

Healthcare Management system:

- Designed a database in PostgreSQL to manage patient records, doctor schedules, and billing, boosting efficiency by 20%.
- Secured sensitive data with encryption and role-based access control, ensuring 100% compliance with privacy standards.
- Built predictive queries reducing no-shows by 15%, improving appointment scheduling.

Driver Drowsiness Detection:

- Developed an ML-based driver drowsiness detection system using a Convolutional Neural Network (CNN) with Keras to analyze eye state images, classify "Open" and "Closed" eyes, and trigger real-time alerts for prolonged eye closure to prevent fatigue-related incidents.

Brain Tumor Classification:

- Built a model to detect and classify the tumor in brain using MRI images basing on their type at an early stage using Convolutional Neural Network (CNN) pooling and convoluting the images using ReLu activation function in the input layer and Sigmoid activation function at the output layer for multiclass classification. Adam optimizer for the optimization, resulting negligible loss Cross-Entropy Loss and 95% accuracy for performance evaluation.

Sign Language Prediction system

- Published a paper "A Model for Sign Language Recognition Using Deep Learning" on IJRASET in June 2022. Created predictive models using Python language to analyze the given image with OpenCV, Keras, NumPy, and Matplotlib libraries.

Baseball Performance Analysis:

- Built predictive models in R to identify factors influencing team success, visualized insights in Tableau, and communicated findings to non-technical stakeholders.

Customer Shopping Trends:

- Developed data visualization using Tableau on customer shopping trends in different regions of the United States by integrating the extracted dataset with the population and median household income in respective regions to communicate findings to a non- technical audience for making intelligent business decisions.

Social Media Analysis of Zappos:

- Designed a database system in MySQL with stored procedures and triggers for engagement tracking.
- Performed sentiment analysis, aiding in marketing strategy optimization. Developed creative techniques to explain technical concepts, fostering deeper understanding among students.

Certifications:

- Google Data Analytics professional certificate

Experience:

Intern web Developer, Samarth IT Solutions — April 2021– June 2021

- Enhanced website user engagement by developing responsive features using HTML5, CSS3, and JavaScript.
- Improved login page functionality, reducing errors by 25% and increasing user logins by 40%.
- Conducted usability tests, refining UI/UX elements based on user feedback and analytics.

Department Assistant MC Cormack, University of Massachusetts, Boston — September 2024 – December 2024

- Troubleshoot audio-video control systems to ensure seamless classroom technology functionality.
- Conducted regular audits to enforce data governance practices, improving accuracy and compliance.
- Automated data quality checks, reducing manual intervention and ensuring system uptime.

Volunteer Tutor, Boys and Girls Club, Dorchester — October 2024 – December 2024

- Delivered educational sessions to high school students, simplifying complex topics for better comprehension.
- Developed creative techniques to explain technical concepts, fostering deeper understanding among students.