Kaushik Parvathaneni

PROFESSIONAL EXPERIENCE

Kelly School of Business | Faculty Research Assistant

May 2023 - July 2023 | Bloomington, Indiana

- Employed Apriori algorithm for Market Basket Analysis, identifying top revenue brands and selecting dominants for an 80% market share.
- Analyzed Price Dispersion using standard deviations, revealing pricing trends. Computed average dispersion per module, creating a ranked table for strategic decision-making.
- Generated strategic insights, aiding decision-making with a focus on dominant brands and pricing dynamics in the market.

Plotmydata | Data Scientist Intern

November 2021 - March 2022 | Hyderabad, India

- Conducted predictive analyses on diverse datasets and orchestrated the design and implementation of a tree-based ensemble machine learning model, achieving remarkable accuracy.
- Developed an interactive web-based dashboard with Plotly and Dash, visually presenting the model's performance metrics. Conducted rigorous testing and validation, employing k-fold cross-validation and hyperparameter tuning for the robustness of the fake news prediction model.
- Enhanced decision-making through real-time insights provided to stakeholders. Achieved consistently high accuracy rates exceeding 95% across diverse projects, including academic performance, Parkinson's Disease diagnostics, and fake news detection.

ACADEMIC PROJECTS

Sentiment Analysis and Text Summarization (Textblob, Gensim, Sumy, NLP, Cleantext)

Code

- Led a cross-functional team in the development of a web-based Sentiment Analysis application, overseeing project planning and execution.
- Leveraged TextBlob for robust sentiment analysis capabilities and Streamlit for intuitive user interface design, ensuring an optimal user experience.
- Implemented advanced text preprocessing techniques and batch processing functionalities, optimizing the application for accuracy and efficiency in sentiment analysis tasks..

AppFusion (SQL, Plotly, Streamlit, sqllite3, Snowflake)

Code

- Developed a personalized app recommendation system utilizing a comprehensive dataset, focusing on the Apple App Store. Implemented algorithms to tailor recommendations based on user preferences, including genre, content rating, and various features.
- Optimized app suggestions, addressing the cold start problem and ensuring diverse recommendations. Created a user-friendly engine with in-depth app details.
- Provided a valuable resource for developers, researchers, and users, enhancing app discovery with personalized recommendations. Improved app selection quality through sophisticated processes from the Apple App Store dataset. Meeting diverse needs with a fun interface and comprehensive app details.

Forecasing SENSEX (MATLAB, ARIMA, Time Series Forecasting)

Code

- Applied ARIMA model to forecast economic data using the SENSEX dataset.
- Utilized ARIMA (p,d,q) structure, employing differencing to ensure stationarity and leveraging autocorrelations for accurate predictions.
- Established a powerful forecasting model, transforming time series for precise economic predictions, providing valuable insights for decision-makers.

TECHNICAL SKILLS

Languages: Java, C, C++, Python, R, JavaScript, SQL, Matlab

Frameworks/Libraries: ScikitLearn, OpenCV, Keras, TensorFlow, NLTK, BERT, SciPy, PyTorch, PowerBI, dplyr, ggplot2 Platforms/Databases: Git, AWS, ETL, SQL, NoSQL, MongoDB, Neo4j, Graph databases, Cassandra, Snowflake Machine Learning and Statistics: Classification, Regression, Clustering, Neural Networks, Self-Supervised Learning, Multi-Modal Learning, Unsupervised Learning, Ensemble Learning, Time Series Analysis, ARIMA model

Applications: Image Processing, Hypothesis Testing, Computer Vision, Time Series Forecasting, Data Mining, Natural Language Processing, Big Data Analytics, Software Development, Data Analysis, Data Visualization, Tableau

EDUCATION

Indiana University Bloomington

Master of Science in Data Science

Bloomington, Indiana August 2022 - May 2024

GITAM University

Bachelor of Engineering in Computer Science and Engineering