Dilani Udugampola

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Result driven Data Analyst/ Scientist with a passion for translating complex data into actionable insights, driving business growth and optimization.

EDUCATION

Arizona State University
Master of Science in Business Analytics and Data Science | 4.00 GPA Honors   May 2023

Illinois State University
Bachelor of Science in Statistics and Financial Mathematics, 3.6 GPA   May 2019

Google Data Analytics Certification | Credential ID SJWHMYNGUPMT   July 2023

WORK EXPERIENCE

Arizona State University – Department of Information Systems | Research Assistant   July 2023 – Present
- Assisting Professor Xia Liu to develop and train extractive and Generative Question Answer Models, utilizing Deep learning techniques, BERT and RoBERTa and OpenAI's GPT 3.5 architectures.

Remotask | Prompt Writer – AI and LLM training (**Freelance**)   July 2023 - Present
- Training and rating responses of Generative Language models to various prompt related to data science topics.

City of Mesa | Data Scientist Intern   Dec 2022 - May 2023
- Led a team of 5 to develop a machine learning based model in python to predict 911 callers requiring emergency transport to the ER result in eliminating unnecessary ambulance transport by 30%, saving estimated $500K annually.
- Implemented XGBoost and Random Forest in Python , identifying top features impacting emergency transport, presented technical insights to senior leadership, contributing to operational efficiency increasing data-driven decisions by 15%.
- Owned end to end delivery, cleaning, exploratory data analysis and feature engineer to preserve accuracy of over 300K 911 callers.

Plains All American Pipeline | Data Analyst Consultant   Jan 2023 - May 2023
- Develop and automated Vendor management process with a dynamic Tableau visualization dashboard, reducing manual work by 95%, leading to an annual time savings of over 500 hours.
- Collaborated in a team of 4, utilizing SQL to clean and manipulate and aggregate vendor data before importing to Tableau to perform visualization, preserving accurate analysis.
- Accomplished **lean six sigma green belt** because of adopting lean methodologies for vendor process improvement, led to a 95% reduction in vendor onboarding time.

J.P. Morgan Private Bank - Wealth Management | Financial Analytics Consultant   July 2019 - Aug 2022
- Accelerated loan processing by 25% via partnership with IT to reengineering workflow, and automation of Net Oxygen: mortgage processing software.
- Championed end-to-end lending process for over 300 high net worth clients from application to closing, ensuring smooth origination, and increasing customer retention by 20%.
- Partnered with Financial planning team, utilized SQL to extract 500 million rows of data, enabling the creation of 30 real-time financial models, optimizing lending decision-making by 20% in FY2021.
- Championed weekly compliance reporting and discussions enabling executives to make data-driven decisions and ensuring adherence to mortgage regulations.

PROJECT EXPERIENCE

Natural Language Processing - US Economic Sentiment Analysis and Topic Modeling | Project Link
- Employed Reddit PRAW API to scrape over 50,000 comments from several subreddits, clean and developed features.
- Trained BERT/ LDA topic models, performed sentiment analysis using pre-trained BERT sentiment classifier to uncover current US economic trends.

Cookie Cat game A/B Testing – Hypothesis Testing | Project Link
- Utilized python to perform statistically significant test (F test and T-test) on A/B test result of player engagement on two versions of the game.
- Performed exploratory data analysis and visualization to asses' trends in player retention and engagement with the game.

On Campus Theft Detection- Computer Vision | Project Link
- Assisted in a team of 4 to create a demo app to identify potential bike theft utilizing CCTV video footage.
- Utilized deep learning techniques : OpenCV, PyTorch, and YOLOv5 architectures for person and bike/ scooter recognition.

Time Series Retail Sales Forecasting | Project Link
- Utilized ARIMA and LSTM to predict retail sales for the next 3 months, analyzing trend and seasonality.

S&P 500 visualization dashboard | Project Link
- Dynamic dashboard to visualize stock prices of S&P 500 companies, across different industries and sectors.

Bike Sharing Demand Prediction | Project Link
- Implemented supervised machine learning model with XGBoost and Random Forest algorithms to predict hourly demand for bikes, reducing waiting time significantly.

SKILLS

Technical: Excel (Power Query, VBA, macros, Pivot Tables, @risk), RStudio, Tableau, MySQL, Google BigQuery, Python (Scikit-learn, Pandas, NumPy, Matplotlib, Seaborn, NLTK, Spacy, OpenCV, TensorFlow, Keras, PyTorch, DBSCAN), Power BI, Google Analytics, Alteryx, Salesforce (CRM), Git, GitHub, Snowflake, Hadoop, Jira.
Statistical/ Analytical: A/B Testing, Hypothesis Testing, Time Series Modelling, Predictive Modelling, Data Visualization, Statistical Modelling, Clustering, Sentiment Analysis, Web Scraping, Data Wrangling, Exploratory Data Analysis.