Kaushik Tummalapalli

7721 6th Ave, Brooklyn, New York, 11209
(+1) 9179944435 kaushiktummala55@gmail.com kaushik-tummalapalli github.com/kaushik-42/

Education

New York University **Sep'22 – (Expected) May'24**
Masters of Science in Computer Engineering, 4.0/4.0 GPA *Brooklyn, New York*
Coursework: Data Science, Machine Learning, Deep Learning, Computing Architecture, Linear Algebra

BV Raju Institute of Technology, Narsapur **Aug'18 – May'22**
Bachelors of Technology in Computer Science and Engineering, 8.38/10 GPA *Hyderabad, India*
Coursework: Data Structures and Algorithms, Statistics, Object Oriented Design, Data Base Systems.

Skills

Languages/Domains: Python, Java, C, SQL[Mongo DB], Machine Learning, Deep Learning, Recommender Systems
Developer Tools: Streamlit, Docker, MLFlow, Airflow, AWS Cloud, S3 Azure, Rest API, Snowflake, Kubernetes, Git
Libraries/Frameworks: PyTorch, CoreFlow, Sklearn, Pandas, Matplotlib, Jupyter, Weights and Biases, XGBoost

Experiences

CVS Health **May'23 – Aug'23**
Machine Learning Engineer Intern(Machine Learning, Software Engineering)
- Contributed to CVS Retail's Analytics Engineering (Platform Optimization team) by addressing cloud spend granularity and budgeting challenges. Introduced an accurate forecasting system utilizing historical data, enabling teams to make informed decisions for resource allocation and budget planning.
- Successfully deployed a Prophet model using Snowpark and Snowflake worksheets, ensuring consistent and accurate budget forecasting with an average MAPE of 20 Percent across all applications and maintaining an 80 Percent accuracy.
- Conducted comprehensive experimentation with a range of time series models, including Prophet, ARIMA, SARIMA, and XGBoost, to forecast budgets for cloud compute and storage usage across various applications within CVS Health.
- Transformed the ML results into actionable insights by storing them in Snowflake tables, enabling seamless integration with the reporting layer for comprehensive data visualization and analysis.
- Created a new data model for Azure Cloud costs to enhance forecasting and reporting capabilities.
- Developed a Streamlit application integrating application-level machine learning models which resulted in improved financial control and operational efficiency.

New York University - Center for Data Science **Jan'23 – May'23**
Section Leader (Graduate Adjunct)
- Instructed 150+ students in the Foundations of Machine Learning course at NYU Courant, employing interactive teaching methods with a focus on hands-on learning. Additionally, providing personalized 1-1 sessions.

Zemoso Technologies **Dec'21 – May'22**
Software Developer Intern
- Designed and implemented a comprehensive Blinkist-style web application software with extensive test case coverage.
- Engineered complete Software Development Life Cycle (SDLC), and worked cross-functionally with engineers and UX.

Carnegie Mellon University (CMKL - Thailand) **Jun'21 – Aug'21**
Research Intern(Machine Learning, Data Collection)
- Improved existing data pipeline results as a part of the masking task to 90 Percent Accuracy for model development.
- Extracted the images from the video source using FFmpeg, created annotations using labelImg for two different warehouses for the raw data to the model and used MATLAB to mask various warehouses.

Omdena **Aug'20 – Jan'21**
Machine Learning Engineer and Volunteer
- Designed custom Machine Learning and Deep learning models (Neural Nets) for Improving the Lives of Cancer Patients by Identifying Non-Cancer Generic Drugs and Modeling the Economic Well-Being through Satellite Imagery.
- Utilized LabelBox to gather a diverse range of labels as part of a NLP project on extracting crucial information.

Projects

Starbucks Recommendation System **Project Link**
- Implemented FUNKSVD algorithm to recommend the current user about best selling offers and also recommend new customers[Mean Squared error of 0.003823 for 15 latent features.]
- This project helps us to understand how people make purchases from the various offers that Starbucks offers around its different locations Worldwide.

Cab Cancellation Prediction Using Machine Learning **Project Link**
- Estimates the cancellation rate of a cab at the current time of booking based on historical data by EDA(Exploratory Data Analysis) with 85 Percent Accuracy by using various ML Algorithms like Decision Trees, Logistic Regression and SVM.