Jhalak Surve

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EDUCATION

Master of Science in Information Systems, Northeastern University - *Boston, MA* *May 2024*
Relevant Coursework: AI Generative Modeling, Data Science Engineering Methods, Neural Network Modeling

Bachelor of Technology in Computer Science, **Rajiv Gandhi Proudyogiki Vishwavidyalaya** - *Indore, India* *June 2021*
Relevant Coursework: Data Warehousing, Machine Learning, Python Programming, Software Engineering

TECHNICAL SKILLS

Programming Languages:	Python, SQL, R, Java
AI and Machine Learning:	Generative Models (GAN, VAE, Transformer), Neural Networks, LLMs
Databases & Data Management:	Microsoft SQL Server, Google Bigquery, MySQL, MongoDB
Tools:	Git, Docker, AWS (EC2, Lambda, S3), Linux, Agile, Apache Kafka, Django

PROFESSIONAL EXPERIENCE

SOFTWARE ANALYST | Yardi Software India Pvt. Ltd. | Pune, India *July 2021 – August 2022*

- Developed 15+ reports using SQL server reporting services (SSRS) and harnessed Google BigQuery to manage 300+ client customizations across four FinTech projects, driving advanced data analysis and reporting.
- Spearheaded data storage and ETL process optimization by developing and managing a repository of 500+ SQL Server database objects and leveraging SQL Server Integration Services (SSIS) to enhance data pipelines.

DATA ANALYST INTERN | Gyrix Technolabs LLP | Indore, India *October 2020 – December 2020*

- Deployed a global data integration strategy using Apache Kafka and Python, optimizing cross-border collaboration, and reducing project development timelines by 10 days.
- Optimized AI-driven customer support with Natural Language Processing (NLP) techniques, reducing response time by 15 minutes.

PROJECTS

Travel Chatbot using GPT *February 2024 – March 2024*

- Developed a smart chatbot using OpenAI's GPT-3.5 to interpret natural language queries and dynamically generate SQL queries for efficient data retrieval from a MySQL database.
- Designed a travel database with Django and React, managing over 1,000 travel records with SQLAlchemy, ensuring seamless frontend-backend interaction.

Aspect Based Sentiment Analysis *December 2023 – December 2023*

- Achieved 93% accuracy in sentiment analysis of processed reviews using NLTK and TextBlob, employing Parts of Speech (POS) tagging to extract key aspects from 50,000 reviews and inform targeted improvements.
- Engineered sentiment extraction using pattern recognition, categorizing customer reviews into 5 classes with 81% test accuracy using SVM and SemEval-2015 Dataset.

ML Model Evaluation using H2O AutoML *September 2023 – November 2023*

- Performed predictive modeling on a Kaggle dataset using three methods - Random Forest, Logistic Regression, and KNN Classifier.
- Applied advanced techniques such as H2O.ai AutoML and Statsmodels for thorough model evaluation.

Boston Blue Bikes Analysis *January 2023 - April 2023*

- Implemented an ArangoDB multi-model database, integrating graph and document models, utilizing live data collected from GFBS feed using a python script with a daily data update frequency of 500 records.
- Optimized AQL queries and Power BI dashboards, reducing execution time from 5 to 3 seconds.

COMMUNITY INVOLVEMENT

- Formulated a Kaggle tutorial for understanding Neural Network Type Classification using CNN and Typeface MNIST dataset, and created a medium article for understanding Confounding Variables.
- Worked as an Application Processor at Northeastern University which involved reviewing the application materials for Graduate and PhD level applications across 9 colleges.