

Raj Sarode

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EDUCATION

Northeastern University , Boston, MA	Sep 2022 – May 2024
<i>Master of Science in Information Systems - Concentration in Data Engineering</i>	GPA: 3.84/4.0
Relevant Coursework: Designing Data Architecture for Business Intelligence, Data Management and Database Design	
University of Mumbai , Mumbai, India	Aug 2018 – May 2022
<i>Bachelor of Engineering in Computer Engineering</i>	GPA: 3.5/4.0
Relevant Coursework: Data Warehouse and Mining, Big Data Analytics, Database Management Systems	

PROFESSIONAL EXPERIENCE

Northeastern University Boston, Massachusetts	
Graduate Teaching Assistant	Jan 2024 – May 2024
<ul style="list-style-type: none">Mentored more than 200 students in Prompt Engineering and Data Science, resulting in improved performance and gradesAssisted professor in teaching graduate students, with a focus on statistical and predictive modeling techniquesFacilitated class discussions, provided feedback on assignments, and led study sessions to help grasp complex conceptsGraded assignments, exams, and developed questionnaires; collaborated with the professor to assess class performance	
Utsavi Trading Co. Mumbai, India	
Data Engineer Intern	Feb 2022 – Jul 2022
<ul style="list-style-type: none">Employed SQL and Python for advanced querying and data cleansing, achieving a significant reduction in data discrepanciesOptimized data processing with SnowSQL to boost accuracy in financial reporting, revealing 15% more cost-saving opportunitiesStreamlined ETL workflows using Alteryx and AWS Glue to enhance risk analysis, achieving a 60% reduction in manual operationsDesigned and executed a data security protocol for sensitive financial information using Amazon S3's encryption and access management features minimizing data breachesImplemented Tableau dashboards for key financial metrics, revealing a 10% increase in operational efficiencies	
Data Operations Intern	May 2021 – Aug 2021
<ul style="list-style-type: none">Performed Spark SQL query optimization by partition indexing resulting in a 70% faster response time from Azure Delta LakeCollaborated with cross-functional teams to implement real-time monitoring and data pipelines in Azure Data Factory, yielding a 20% increase in fraud prevention efficiencyDeveloped T-SQL objects in Azure Synapse Analytics, enhancing ETL and data flow in OLTP environments for better performanceCreated comparative Power BI charts, illustrating variations in annual premiums and claims across diverse insurance products	

PROJECTS

Web Wise - RAG Chatbot (Python, Streamlit, Chroma DB, LangChain, Flask, Beautiful Soup)	Jan 2024 – Mar 2024
<ul style="list-style-type: none">Orchestrated the integration of a RAG chatbot using LangChain to enable dynamic interaction with and parsing of website contentEngineered a high-performance data processing pipeline utilizing Python, integrating web scraping, text preprocessing, vectorization, and Chroma DB for embedding storage, resulting in a substantial boost to the chatbot's functionalityDesigned an accessible chatbot interface with Streamlit, improving the overall user experience by making interactions engaging	
Open Weather Cloud Analytics (AWS, Snowflake, Python, Sreamlit)	Sep 2023 – Dec 2023
<ul style="list-style-type: none">Built a Python/AWS ETL pipeline hosted on EC2 to ingest data from 100+ US cities scraped from weather API into SnowflakeIllustrated data visualizations to identify relationships between AQI, temperature, and humidity using matplotlib, seaborn, plotlyFormulated an interactive Streamlit application to analyze relationships between climatic factors impacting major cities	
Collision Scope: NYC Traffic Dynamics (Azure Data Studio, Talend, Navicat, Power BI, Tableau)	Feb 2023 – May 2023
<ul style="list-style-type: none">Analyzed NYC-MVC dataset using Azure Data Studio for insights, enhancing data accuracy with SQL data validation and cleaningPerformed data integration through Talend Open Studio ETL processes, resulting in successful ingestion into the data modelGenerated advanced dashboards in Tableau and Power BI for NYC traffic, focusing on collision trends in high-risk areas	

SKILLS

Programming	Python, SQL, T-SQL, R, JavaScript
Database Systems	Microsoft SQL Server, PostgreSQL, NoSQL, MongoDB, Spark SQL, Azure Data Studio, Azure Synapse Analytics
Visualization Tools	Tableau, Microsoft Power BI, MS Excel
Big Data	Alteryx, Talend Open Studio, Apache Spark, PySpark
Cloud Services	Amazon Web Services (AWS), Microsoft Azure, Snowflake, Azure Data Factory, Azure Databricks
Certifications	AWS Certified Cloud Practitioner, Google Analytics, Alteryx Designer Core

LEADERSHIP EXPERIENCE AND RECOGNITIONS

• DATA Club - Active Member	Sep 2022 – Present
• Computer Society of India - Treasurer	Jul 2021 – June 2022