VISMAYA MOHANRAM

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EDUCATION

Illinois Institute of Technology, *Chicago, IL* ***Aug 2022 - May 2024***
Master of Science in Computer Science – Data Analytics | GPA: 3.6/4.0
Relevant Coursework: *Big Data Technologies, Data Preparation & Analysis, Mobile Application Development, Machine Learning, Computer Networks, Advance Database Organization, Online Social Network Analysis, Software Project Management*

The National Institute of Engineering, *Mysore, India* ***Aug 2014 - Jun 2018***
Bachelor of Engineering in Computer Science and Engineering | GPA: 3.71/4.0

WORK EXPERIENCE

Infosys Limited | Client: Swiss Re, *Bengaluru, India*

Data Engineer ***June 2020 – Aug 2022***

- Spearheaded the migration of over 10 terabytes of reinsurance data from on-premises servers to Azure Data Lake, resulting in a 30% reduction in data retrieval times and improved data accessibility for analytics teams.
- Designed Azure Data Factory pipelines to automate ETL processes, reducing data processing time by 60%.
- Ensured seamless integration and efficient operation of Databricks, optimizing the performance of data pipelines.
- Experienced in migrating and structuring data within Teradata and Snowflake, enhancing data accessibility and ensuring accuracy.
- Constructed complex SQL queries to extract and consolidate data from multiple sources, streamlining reporting through ETL techniques.
- Implemented advanced CI/CD techniques to streamline Python dependency updates, boosting data pipeline performance by 35% and saving the team 30 hours monthly in manual checks.
- Collaborated with over 15+ stakeholders from the product and design teams to address and resolve data-related technical challenges.

Data Analyst ***July 2018 – June 2020***

- Refined master data and executed automated clean-up processes, which enhanced data quality improvements for 10+ business processes and internal reporting.
- Implemented ETL pipelines using Apache Kafka and Apache Spark, processing over 5 million records to ensure real-time data streaming and transformation.
- Applied knowledge of SQL Server Integration Services (SSIS) for data integration and ETL processes, enhancing data pipeline efficiency.
- Improved data accuracy and reliability through SQL and Data Modeling for effective metric tracking and reporting.
- Developed interactive Power BI dashboards using expertise in DAX & Power Query. These dashboards translated complex business requirements into clear visualizations of over 20+ vital KPIs.
- Collaborated with cross-functional teams to gather requirements and generate detailed SQL queries, improving data accessibility by 35%.

TECHNICAL SKILLS

Programming Languages : Python, SQL, Java
Database : MySQL, PostgreSQL, Oracle, MongoDB, NoSQL
Cloud Technologies : AWS (EC2, Redshift, Lambda, EMR), Azure (Databricks, Blob), S3 bucket
ML libraries and frameworks : Pandas, NumPy, TensorFlow, Matplotlib, Scikit-Learn, Keras, Pytorch, Seaborn
Data Analytics & Business Intelligence: Microsoft Power BI, Tableau, MS Excel, VLOOKUP, ETL, Apache Spark
Developer Tools and Platforms: Git, Docker, JIRA, Agile, MS Excel, Jupyter Notebook

ACADEMIC PROJECTS (GitHub)

Social media Analysis - Reddit | *Illinois Institute of Technology* ***Jan 2024 – May 2024***

- Developed a social network analysis project using Python to analyze Reddit data. Utilized Reddit's API to extract data on relationships between the author of the post and author of comments on the post.
- Created interactive visualizations in Tableau to explore the data and leveraged PRAW library for efficient data retrieval from Reddit.

Exploring Big Data Analytics using Machine Learning | *Illinois Institute of Technology* ***Sept 2023 – Dec 2023***

- Implemented various ML algorithms with TensorFlow to compare performance, speed, and accuracy on the WHO dataset. Built a pipeline using the TPOT classifier for optimal accuracy. Leveraged extensive data analysis, visualization, and diverse ML techniques, with the Neural Network achieving the highest accuracy.

Credit Card Defaulters using Machine Learning | *Illinois Institute of Technology* ***Feb 2023 – May 2023***

- Developed ML models to predict credit card defaults using a dataset of users' credit history, consumer demographics and payment habits. Trained and evaluated various models to find the best one based on accuracy. The Voting Classifier performed well in predicting defaults and Random Forest performed well among the individual models with 81.3% accuracy.