Lakshmi Pooja Devarapu

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Summary

A master's student in Computer Science with a focus on data engineering, offering 3+ years of practical experience in developing and managing data pipelines and cloud-based data warehousing solutions. Skilled in leveraging AWS, Python, Kafka, and Spark to build scalable data systems.

Education

University of North Carolina at Charlotte, NC, MS in Computer Science in Data science

Aug 2022 - Dec 2023

Skills

Java, Python, C, Scala, MySQL, MongoDB, PostgreSQL, NoSQL, Snowflake, Amazon Redshift, Apache spark, Kafka, Datalake, Hadoop, Eclipse, Jupiter Notebook, Visual Studio, AWS, Azure, Docker, Kubernetes, Azure Devops, Talend, Apache Airflow, Aws Glue, PowerBI, Tableau, Rest APIs, Web Services, Unix, Linux, MacOS, Windows, Git, GitHub, Bitbucket, Agile, Scrum

Experience

Data Engineer,

United Airlines, TX

Feb 2024- Present

- Designed and implemented data ingestion solutions using Hadoop, MapReduce, HBase, Hive, Spark, AWS S3, AWS Lambda, DynamoDB, EMR, Redshift, and server management APIs.
- Engineered scalable multi-tiered web services using **Java** and **MongoDB**, achieving a data processing throughput increase of 30% while managing deployment with **Docker** and **Kubernetes** for improved operational efficiency.
- Orchestrated the development of real-time Tableau dashboards, enabling 15+ team members to access key metrics and enhance decision-making across departments with actionable insights using Python, SQL, Scala, Snowflake, and Spark.
- Designed and optimized 15+ data models and warehousing solutions, developed and maintained 30+ ETL pipelines in SQL, and implemented secure data access platforms, resulting in a 40% improvement in reporting efficiency
- Demonstrated proficiency in relational and non-relational databases, object-oriented scripting (**Python, SQL, TypeScript, Java**), and **REST APIs** enhancing data accessibility for 15+ team members.

Data Engineer,

Varky Technology Solutions, Hyderabad, IN

March 2020 - Jun 2022

- Developed and optimized 25+ data pipelines using AWS, Python, SQL, and Apache Spark. Skilled in Snowflake in cloud-based warehousing and Kafka for real-time data streaming, improving data processing efficiency by 35%.
- Orchestrated 40+ **data workflows** using **Azure Data Factory** (ADF) and **Airflow**, automating integration and transformation processes to enhance data pipeline efficiency by 30%.
- Utilized AWS technologies (Redshift, S3, Glue, EMR, Kinesis, Firehose, Lambda, IAM) for scalable data architecture, and Engineered solutions using non-relational databases (object storage, document/key-value stores, graph databases) resulting in a 35% improvement in query performance
- Enhanced application and query performance by 25% using profiling tools and **SQL**, while implementing best practices in **data integrity**, analysis, and **documentation** to ensure robust and reliable **data management**.

Projects

COVID 19 Big Data Analysis

- Outlined and managed data engineering solutions using Azure Data Factory, Data Lake Gen2, Blob Storage, and Databricks, including
 pipeline integration and complex control flows.
- Applied and monitored ADF pipelines with Azure Monitor, configured CI/CD processes using Azure DevOps, and managed scheduling
 and debugging for data transformations, resulting in a 20% reduction in deployment time.

Malaria identification using a neural network

- Originated and executed a CNN model analyzing 10,000+ blood microscopy images, reducing detection time by 40% for lab technicians.
- Leveraged deep learning for automated feature extraction, boosting diagnostic accuracy by 30% and addressing complex challenges.

Certifications

- · AWS certified cloud practitioner
- Azure Databricks attested Apache associate spark developer
- Azure Databricks licensed lake house fundamentals
- Udemy accredited in Snowflake master class
- Machine learning in Python (IBM issued
- PET and BEC certified in English (Cambridge issued).