Rahul J

Location: Bangalore, India

Objective

I am eager to tackle challenging tasks that utilise my technical skills and knowledge to contribute to company growth. Committed to continuous learning to meet future company needs.

Education

- **B.E. Mechatronics**   *Mahendra Engineering College, 2019–2023*
  CGPA: 8.43

- **HSC**   *St. Mary's School, 2017–2019*
  Percentage: 66

- **SSLC**   *St. Mary's School, 2015–2017*
  Percentage: 86

Internship Experience

Data Engineering with AWS - BridgeLabz   *Aug 2024 – Dec 2024*

- Conducted exploratory data analysis and visualisation using tools like NumPy, Pandas, Matplotlib, and Plotly.
- Worked on foundational programming and advanced data engineering concepts, including Python, Hadoop, Spark ,and PySpark.
- Designed and implemented ETL/ELT processes and developed data pipelines using AWS services (S3, RDS, DynamoDB, Lambda, Redshift).
- Gained exposure to machine learning, GenAI, and MLOps, with practical applications in real-world scenarios.

Projects

AWS Project: Data Pipeline on AWS

- Objective: Developed a data pipeline that automatically converts CSV files stored in an S3 bucket into JSON format and stores them in another S3 bucket.

- **Key Components:**

  - AWS Glue: Configured an ETL job for data transformation.

  - AWS Lambda: Set up a function with a trigger to automatically initiate the Glue job upon file upload.

  - IAM Role: Created and configured an IAM role with necessary permissions for Glue and Lambda services.

- **Workflow:**

- Uploaded a CSV file to the input S3 bucket.
- Lambda triggered the Glue job, which processed and converted the file to JSON.
- Verified the output in the target S3 bucket.

AWS Project: End-to-End Data Pipeline

- **Objective**: Designed a complete data pipeline for data processing and analysis using AWS services, integrating data ingestion, transformation, and querying.

- **Key Components**:

  - **CloudFormation**: Automated resource setup, including S3 bucket and Redshift cluster.

  - **AWS Glue**: Created a database, crawler, and ETL job for cataloguing and transforming data from S3 to Redshift.

  - **Redshift Query Editor v2**: Connected to the Redshift database to execute SQL queries for validation and insights.

- **Workflow**:

– Set up S3 bucket and Redshift cluster using CloudFormation.
– Catalogued data in AWS Glue using a crawler linked to the S3 source.
– Configured and ran ETL jobs to prepare data for analysis.
– Queried the processed data in Redshift for insights.

Technical Skills

- **Programming:** Python, Java, JavaScript

- **Big Data & Cloud:** Hadoop, PySpark, AWS (S3, RDS, DynamoDB, Lambda, Redshift)

- **Web Development:** HTML, CSS

- **Frameworks & Libraries:** Hibernate, JDBC, Spring Boot (Basics)

- **Database:** MySQL, MSSQL

- **Tools:** Git, GitHub, Postman, VS Code, SSMS, Eclipse

Certification

– Certified in Java Full-Stack from JSpiders Basavanagudi Bangalore.