RAMGOPAL TUMMALA

Austin, TX. ✉ tummalaramgopal@gmail.com ,+19714277383

Education

Portland State University   **Sep 2022 - Jun 2024**
M.S., Computer Science   *Portland, OR*
> **Coursework:** Data Engineering, Machine Learning, Artificial Intelligence, Internet web and cloud, Database Management, Web Development, Algorithms Design, Software Engineering

SKILLS

Azure, AWS, GCP, S3, Glue, Ec2, Athena, Snowflake, Databricks, Azure Data Factory, Azure Blob Storage, Data Lake Storage Gen2, Hadoop, Pysark, Kafka, HBase, Airflow, MySQL, PostgreSQL, Pandas, Matplotlib, Seaborn, Prompt Engineering, Langchain, Python, HTML, JavaScript, C, Docker, Git, CI/CD, Postman API, Database Design, Data Engineering, SQL Server, ETL Processes, Python Scripting.

Work Experience

Rean Foundation   **Jan 2024 - Present**
AI and Data Engineer Intern   *Virginia, USA*
- Developed an API to generate data from LLMs, convert data to CSV, and upload to S3. Jobs executed using EC2 instances.
- Created snapshots for Postgres databases and uploaded them to S3 for backup.
- Utilized AWS Glue to extract data from S3, transform it, and load it into Snowflake.
- Implemented triggers to run AWS Lambda functions on S3 uploads and maintained CloudWatch logs.
- Migrated jobs from EMR to AWS Glue, setting up necessary IAM roles for service access.

Rean Foundation   **Sep 2023 - Dec 2023**
AI Developer Intern   *Virginia, USA*
- Developed AI solutions using Langchain and various LLMs, creating bots with chaining mechanisms for complex business requirements.
- Analyzed business needs, optimized AI model performance, and drove innovation through AI model integrations.
- Created test plans to monitor and evaluate bot performance, ensuring high operational standards.
- Implemented CI/CD pipelines for continuous integration and deployment of data and AI models, improving development efficiency.

Xpertmatters   **Jan 2021 - Aug 2022**
Data Engineer   *Hyderabad, INDIA*
- Orchestrated and optimized ETL pipelines using Azure HDInsight, Azure Databricks, Azure Data Factory, and Azure Blob Storage with Databricks-PySpark.
- Developed a pipeline for transferring data from Azure Blob Storage to GCP Storage for backup. Automated the process with the help of azure functions and blob triggers
- Automated data pipelines with Azure Data Factory and Databricks, streamlining operations.
- Utilized Blob Storage to convert data from CSV to Delta format and built Delta tables on top of it using databricks workspace.
- Implemented secure access management via Azure Key Vault for data protection.

Projects

Automated Validation and Processing of Order Files with Dynamic Pipeline
- Designed and implemented an end-to-end data pipeline using Azure services, ensuring seamless data flow and integration..

Data Pipeline for TriMet Transportation Analytics
- Developed seamless data pipelines using Python, BS4, and Pandas to extract data from REST APIs, web scraping, and file systems, processing ~1 million records daily.

Automated Loan Score Calculation and Data Processing
- Developed a PySaprk-based Pipeline to automate loan score calculation, clean and process data, and create structured data frames and tables.

Traffic Route Prediction and Analysis
- Extracted, cleaned, and processed traffic data; partitioned dataset into training (80%) and testing (20%).

Trip Planning Website Using Google Location API
- Designed a website to streamline trip planning with sections for Restaurants, Hospitals, Groceries, and Hotels.

Certifications

- **Microsoft Azure Fundamentals**:
- **Microsoft Azure Data Fundamentals**: