# Venu Gopal

#### PROFILE

Data Engineer with 4+ years of experience in building large-scale data pipelines, ETL processes, and data warehouse solutions. Utilized technologies like **Python**, **SQL**, **Spark**, **Airflow**, **AWS** and **Kafka** to develop multi-terabyte scalable big data solutions for Fortune 100 Pharmaceutical and E-commerce companies.

#### TECHNICAL SKILLS

Programming Languages: Python, SQL, Shell-scripting

Big Data Technologies: Spark, PySpark, Spark SQL, YARN, Jenkins, DynamoDB, Hive

Streaming Technology: Kafka, Spark structured streaming, Amazon Kinesis

Cloud computing: AWS Lambda, EC2, Databricks, AWS Redshift, Amazon S3, AWS Glue, AWS EMR

Data Engineering Tools: AWS CodePipeline, Data Modelling, ETL/ELT data Pipeline

Orchestration: Airflow, EventBridge Scheduler
Familiar: Apache Iceberg,Machine Learning

#### EXPERIENCE

### Ascendion Engineering Pvt. Ltd

Feb 2024 - Present

Senior Software Engineer

Bangalore, India

- Build a configuration driven extension to airflow where developers can define their workflows in YAML format and consistently produce automatic DAG code which airflow can interpret.
- Conduct data validation on source and staging tables using DAG factory with a YAML configurational approach. Execute table transformations using Airflow and migrate data into other SQL environments.
- Integrated and processed pharmaceutical data from multiple sources including AWS, Azure, and on-premise database handling various file formats like JSON, CSV, and Parquet.
- Implemented Spark optimization techniques such as caching, multithreading, and broadcast joins, resulting in a 20% decrease in processing time for handling a daily load.

### LT Technology Services

Jun 2023 - Nov 2023

Senior Engineer

Bangalore, India

- Created an API service using Python to generate dynamic DAGs in Apache Airflow.
- Designed and implemented advanced scheduling capabilities using Airflow for data pipeline orchestration, reducing manual intervention time by 80% and streamlining workflow efficiency.
- Developed a solution leveraging Amazon MSK (Managed Streaming for Apache Kafka) to push messages for real-time tracking of processing status (success or failure).

Hinduja Global Dec 2021 - Apr 2023

Data Engineer

Bangalore, India

- Worked within the marketplace team with the primary objective of enhancing seller experience.
- Integrated and transformed data from various digital platforms, prepared data, built ETL and ELT processes, and orchestrated and monitored pipelines utilizing AWS Glue.
- Optimized overall process performance through **Spark performance tuning**, improving job run times by 20% and efficiently managing a **Terabyte(TB)** dataset.
- Worked on data ingestion pipeline to ingest the flat file in the **Data lake**.

Phasor Pvt. Ltd Oct 2019 - Nov 2021

 $Business\ Analyst$ 

Mumbai, India

- Worked extensively with large marketing datasets concerning user behavior, identifying trends, and conducting in-depth analysis to draw meaningful conclusions.
- Utilized standard metrics such as Click-Through Rate, Conversion Rate, ROI, Cost per Click, etc., to gauge the success of campaigns..

# EDUCATION

# CMR Institute of Technology