

## PROFESSIONAL EXPERIENCE

### Data Infra Engineer, Apple, Seattle

📅 May 2023 - Present

#### • Tech Stack - AWS, Kubernetes, Spark, Ranger, Airflow, Solr, Hive, Flink, JupyterHub, Python

- Contributed to the development of a hybrid-cloud, multi-tenant data platform, aiming to optimize Data Engineering, Machine Learning, and Analytical processes for enhanced scalability and efficiency across diverse teams.
- Enhanced core products such as Apple Maps, Search, and Siri by integrating our cutting-edge data platform, which utilizes the latest big data technologies, boosting their AI/ML functionalities.
- Assisted in the design and deployment of a high-capacity streaming ingestion platform, handling up to 1 trillion events daily, leveraging Apache Kafka and Spark Streaming within a Kubernetes environment.
- Contributed to the strategic implementation of security protocols for data handling, collaborating with tools like Spark, Ranger, and Solr on Kubernetes to fortify data integrity and optimize accessibility.

### Software Engineer, Deloitte, Bengaluru, India

📅 August 2019 - July 2021

#### • Tech Stack - Azure Databricks, Spark, Scala, Airflow, Python

- Worked on an application to assist packaged consumer manufacturers in identifying components that impact sales, such as pricing, distribution, promotion, and advertising, and to compare their performance with competitors.
- Created a data-based framework to read 30 TB of data from multiple sales acquisition channels and analyzed sales activity for 5 years in various regions across the globe.
- Ordering UI (ideation, planning and coordination): Worked with the UI team to create a platform where the product leaders can set up jobs with required parameters and jobs run cadence.
- Actively worked on the orchestration of the pipeline where the application trigger points were reduced from two to a zero-touch application with the help of Apache Airflow, that reduced the cost of operations by 30 %.
- Got Two Spot Awards for the contribution to the team.

#### • Tech Stack - AWS, Redshift, Spark, Kafka, Airflow, Tableau, Python

- Built ETL pipelines to extract, transform, and load large volumes of data from various sources into data warehouse enabling near-real-time data analysis and decision-making.
- Worked on implementing data models and schemas for optimal storage, retrieval, and analysis of data.
- Developed and maintained data pipelines for real-time data processing, using technologies like Kafka and Spark.
- Built automated data quality and validation checks to ensure data accuracy and consistency, reducing errors by 40%.
- Got One Spot Award for the contribution to the team.

## PROJECTS

### Log File Monitoring and Alert System

*AWS(EKS, EMR, SNS, ECR), Apache(Spark, Kafka)*

- Designed and Developed an cloud architecture which uses a log file generator application deployed onto an AWS Elastic Kubernetes cluster to write logs into AWS Elasticache Redis Database.
- Utilized the AKKA actor system's ability to continuously monitor database and forward errors to a Kafka Topic and used an AWS EMR Spark Cluster to stream logs from the topic to alert stakeholders.

### Aviation Data Pipeline

*GCP(GCS, Big Query, Data Studio, Wrangler), Python, Docker, Airflow*

- Built an end-end data engineering pipeline to analyze the aviation data of individual airline, airline sectors and industry as a whole. Created an ETL pipeline using Data Fusion(GCP)to visualize the data from airline API using kafka and batch processing.

### AzureFlow

*Azure(DevOps), Terraform, Jenkins, Python, Bash*

- Developed an efficient Azure cloud infrastructure for large-scale research data management. Also, automated a CI/CD pipeline with Azure DevOps, Terraform, and Jenkins for optimized software builds, tests, and deployments.

## SKILLS

**Data Processing & Management** Apache (Hadoop, Kafka, Spark, Airflow, Flink, Ranger), Trino, Docker, Kubernetes

**Monitoring, Infrastructure & CI/CD** Datadog, Jenkins, Splunk, Pulumi

**Databases & Cloud** MySQL, MongoDB, Redis, AWS, Azure, GCP

**Programming** Java, Python, JavaScript, SQL, HTML/CSS, PHP, Scala

**Web Technologies** HTML5, CSS, Bootstrap

## EDUCATION

**Masters in Computer Science - University Of Illinois Chicago, Illinois**

📅 Aug 2021 - May 2023

**PG Diploma in Data Science - IIIT Bangalore, India**

📅 Jan 2020 - Jan 2021

**Bachelors in Computer Applications - Bangalore University, India**

📅 May 2016 - June 2019