

BHARATH SURAMPUDI

Data Engineer | AWS | Java & Python

Sydney, Australia | (0410) 638 861 | bharathsurampudi@gmail.com

[\[Portfolio\]](#) | [\[LinkedIn\]](#) | [\[Github\]](#)

PROFESSIONAL SUMMARY

Data Engineer with rigorous commercial software engineering experience at **Mastercard**. Expert in architecting secure, scalable data pipelines using **Apache NiFi, Java, and Python** within regulated financial environments. Proficient in the **Modern Data Stack (AWS, Airflow, dbt)**, bridging the gap between software engineering best practices (CI/CD, Testing, APIs) and cloud-native data infrastructure.

TECHNICAL SKILLS

- **Cloud Data Platforms:** AWS (S3, Glue, Redshift, EMR, Lambda, Athena, IAM), Terraform.
- **Data Engineering:** Apache NiFi, Apache Airflow, dbt (Data Build Tool), Spark, Kafka.
- **Programming:** Python (Pandas, PySpark, Boto3), Java (Spring Boot), SQL, Shell Scripting.
- **DevOps & Observability:** Docker, Git/GitHub Actions, Jenkins, Splunk, Datadog.
- **Databases:** PostgreSQL, Amazon Redshift, Snowflake, MongoDB.

PROFESSIONAL EXPERIENCE

Software Engineer II (Core Payments) | Mastercard, Sydney November 2021 – Present

- **Enterprise Data Pipeline Orchestration:** Built and maintained end-to-end data ingestion pipelines using **Apache NiFi**. Managed secure routing of sensitive payment data across global regions, ensuring 99.99% availability and strict regulatory compliance.
- **Data Observability & Monitoring:** Built real-time **Splunk dashboards** to ingest and visualize NiFi migration logs, enabling proactive detection of data transfer bottlenecks and reducing incident resolution time (MTTR) for critical payment flows.
- **Microservices Reliability (Data Contracts):** Implemented consumer-driven contract testing using **Spring Cloud Contract** across 5 microservices on PCF. Validated producer/consumer schemas to prevent breaking changes and ensure data consistency for downstream consumers.
- **API-Driven Data Integration:** Developed robust **Java Spring Boot APIs** to serve high-volume transaction data to downstream analytics and payment gateways, optimizing latency for real-time processing.
- **Cross-Functional Optimization:** Collaborated with data architecture teams to modernize legacy ETL jobs, improving data throughput for financial reporting systems.

Software Engineer | Neau Collective, Sydney *March 2021 – November 2021*

- **Automated Data Ingestion:** Developed **Python** automation scripts to extract, clean, and consolidate data from Shopify and external marketing APIs, reducing manual reporting effort by 70%.
- **Data Warehousing Support:** Integrated distinct data sources (Sales, Marketing, Accounting) to build unified datasets, enabling cross-channel performance analysis for business intelligence.

CLOUD & DATA ENGINEERING PROJECTS

End-to-End Serverless Data Lakehouse on AWS

Tech Stack: AWS S3, AWS Glue, Amazon Redshift, dbt, Terraform

- Designed a cloud-native data platform to ingest raw data into a Data Lake (S3), process it, and load it into a Data Warehouse (Redshift).
- Developed **AWS Glue** ETL jobs (PySpark) to clean, partition, and convert raw CSV data into Parquet format.
- Implemented **dbt** for in-warehouse data transformation and automated schema testing (Data Quality).
- Provisioned all infrastructure using **Terraform** (IAC) to ensure reproducibility.

Scalable Data Orchestration Platform

Tech Stack: Apache Airflow, Python, Docker, PostgreSQL, AWS SNS

- Built a containerized **Apache Airflow** environment to schedule complex dependent data workflows (DAGs).
- Automated ingestion from external APIs with dynamic DAG generation and configured SNS alerts for pipeline failures.

EDUCATION

Master of Information Technology | University of New South Wales (UNSW), Sydney

- Specialization: Artificial Intelligence & Database Systems

Bachelor of Technology in Computer Science | Vellore Institute of Technology

CERTIFICATIONS

- **AWS Certified Data Engineer – Associate (DEA-C01)**
- **DeepLearning.AI Data Engineering Professional Certificate**
- **Apache Airflow Fundamentals Certification**
- **dbt Fundamentals Certification**