

# Loki Purushothaman

Consultant

## Profile

Loki is a skilled Data, Analytics and Insights engineer with expertise in building Data Science/Data Engineered products and deploying them to production.

Having completed a Masters of Science, Data & Innovation Loki has proven excellence in proposing data-driven solutions to business problems at various levels of leadership, simplifying report complexity, decluttering visualisations, and mining hidden gems in datasets. His recent certification as a Google Cloud Certified Professional Data Engineer has enabled him to advance his skills in cloud across all three clouds, AWS, Azure and GCP. Loki is a great communicator and demonstrates high level interpersonal skills and excellence to solve complex problems.

## Key Skills & Technologies

- Google Cloud Platform
- Azure
- Amazon Web Services
- Data Engineering
- Data Migration
- Data Integration
- Data Science
- Data Analysis
- Deep Learning
- Statistical Methods
- Data Structures
- Data Visualisations
- Network Analysis
- Python
- Java
- SQL
- R
- BigQuery
- Windows
- Linux
- iOS
- Git
- Node JS
- Tensorflow
- CDK
- Redshift

# Consultant Profile

## Selected Project Experience

### Entertainment & Gaming Organisation

Established and managed Corporate Data Warehouse migration from an on-premise Sybase IQ database to the Google Cloud Platform.

- Architect, solution design and build a robust daily data ingestion pipeline from Crown source system data repositories to GCP
- Project involved migration of over 1000 tables, and 700 stored procedures in Sybase to Google BigQuery.
- Extracted the data object relationships of the tables, views, stored procedures, and Informatica workflows. Set up an easy-to-use graph analysis system to track the data lineage and their clustering relationship.
- Reduced the technical risk and paved the way for smooth project delivery.
- As a GCP data specialized partner, this project was one of the very first implementations of a solution using Google Cloud Eventarc in Australia.

### Major Australian Logistics Organisation

- Gathered data from internal sources by quickly assimilating business and subject expertise, and useful external data to complement the features for machine learning models.
- Enhanced the performance of queries used by the Data Science team, yielding ~70% improvement in processing time over 10+ TB data, while reducing memory usage by two-thirds, by implementing CTEs and SQL windowing functionality in place of sub-query-based structures
- Implemented and structured branching and merging strategies on version control and facilitated CI/CD of pipelines.
- Reverse-engineered a complex and manually maintained business artefact from parcel movement transactional data, revealing unseen insights

### Energy Sector Organisation

- Migrated Talend workloads to Azure Data Factory, to help decommission the existing on-prem systems and move into Azure cloud.
- Extensively utilised Azure Data Bricks for data munging. Used the medallion architecture solution to develop a centralised DataLake.
- Architected data platform using Azure Blob and Azure Databricks Build data pipeline to communicate with external APIs using TypeScript and NodeJS in AWS
- Used CDK to manage infrastructure as code and enable, deploy personal stacks for test and development before deploying to production using GitHub Actions for CI/CD
- Polled data from external API using AWS Lambda, push it to MQTT, Kinesis and load into Influxdb for visualizing in Grafana in real-time
- Created internal APIs for project team to be able to communicate with external APIs securely



## Industry Experience

- Financial Services
- Entertainment & Gaming
- Energy Sector
- Education
- Retail

## Certification

Google Cloud Certified | Professional Data Engineer

Master - Science, Data & Innovation  
University of Technology, Sydney

Bachelor - Engineering, Electronics & Communications  
Anna University, India

