KEVIN JOJI MATHEWS

Data Engineer

EDUCATION

MSc Big Data Science, Queen Mary University of London, London

Sept 2023 - Sept 2024

Relevant modules: Data Mining, Cloud Computing, Machine Learning, Big Data Processing, Neural Networks and Deep Learning.

B.Tech in Electronics and Communication, National Institute of Technology, Calicut Jun 2018 - Sept 2022 Relevant modules: Artificial Intelligence, Data Structures using C++, ANN and Fuzzy Logic Systems.

SKILLS

Technical Skills Python, Java, SQL, Postgres, Git, Bash, Docker, Terraform, Airflow

Data Engineering ETL Pipelines, Data Warehousing, API Integration

Cloud Azure (Azure Data Factory, Databricks, Data Lake), Google BigQuery
Data Analysis Numpy, Pandas, Matplotlib, Seaborn, Tensorflow, PyTorch, PySpark

Soft Skills Communication, Responsible, Team Collaboration, Problem-Solving, Analytical

EXPERIENCE

Network Data Engineer Intern GBM Qatar

 ${
m Dec}\ 2021$ - ${
m Jan}\ 2022$

Doha, Qatar

- Designed and optimized **ETL pipelines** to process and analyze network performance data from **50+** access points across the Qatar Metro Rail, leading to a **20%** improvement in Wi-Fi performance.
- Developed a user-friendly web application using **Python and Django** for project management, enhancing project tracking and collaboration efficiency by 40%.
- Partnered with a cross-functional team to implement data ingestion workflows using Google BigQuery, automating Wi-Fi module performance analysis for the FIFA World Cup 2022 stadium.

PROJECTS

Reddit ETL Pipeline | Python, Airflow, Docker, PySpark, Databricks, Azure Data Factory

- Developed an end-to-end ETL pipeline to process Reddit API data using Python, Docker, and Airflow.
- Orchestrated data workflows with Airflow, automating data ingestion and transformation tasks.
- Implemented Azure Blob Storage for raw data storage and Databricks for data processing using PySpark.

Text Extractor | Python, Flask, GCP, Google BigQuery, Google Cloud Storage

- Designed a full-stack application with user authentication, image upload, and text extraction using Flask and Google Cloud Vision API.
- Integrated Google Cloud Storage and Google BigQuery for efficient data management, reducing manual processing time by 75%.

Covid Pneumonia Detection from Chest X-Rays | Python, Matplotlib, Numpy, Tensorflow

- Developed and fine-tuned **image classification models** (VGG19 and custom models) to detect Covid-induced pneumonia, achieving an accuracy of 82%.
- Implemented pooling methods to optimize model training and reduce computation time by 30%.

PUBLICATION

Wang, H., Mathews, K.J., Golec, M., Gill, S.S. and Uhlig, S., 2025. "AmazonAICloud: proactive resource allocation using amazon chronos based time series model for sustainable cloud computing". Computing, 107(3), p.77.