Glawin Alva

AI Focused Data Engineer and a Problem Solver | Driving Data-Driven Business Transformation

📞 +44 7341704465   ✉ glawin24@gmail.com   📍 Birmingham, United Kingdom   in [LinkedIn](#)   ◯ [GitHub](#)   🌐 [Website](#)

SUMMARY

Master's in AI and Business Strategy from **Aston University, Birmingham**, previously worked as an **Associate IT - Data Engineer** and at **Tata**, a leading Indian organization, focusing on **data-driven solutions** and **enterprise architecture**. Adept at designing **scalable data infrastructures**, implementing **governance frameworks**, and driving **data transformation initiatives**. Strong background in **data lifecycle management, metadata management, cloud computing (AWS),** and **ETL processes**. Passionate about leveraging **data** as a strategic enabler to support **business transformation, innovation,** and **operational efficiency**.

TECHNICAL SKILLS

- **Operating Systems:** Windows, Linux/Unix
- **Programming Languages:** Python, Java, C++, SQL (PL/SQL, T-SQL including Database Management Languages: DDL, DML, DCL, TCL)
- **Machine Learning & AI:** PyTorch, Hugging Face, BERT, Deep Learning, NumPy, Pandas, Scikit-learn
- **Data Tools & Visualization:** SQL, Power BI, Google Looker
- **Data Architecture & Governance:** Data Modeling, Data Integration, Data Quality, Taxonomies, Metadata Management, Data Policies & Standards
- **Data Management & Processing:** Data Lifecycle Management, ETL, Data Lakes, Apache PySpark, Pentaho
- **Databases:** MySQL, PostgreSQL, Greenplum, Firebase
- **Cloud Platforms:** AWS (Lambda, SageMaker - Learning)
- **Soft Skills:** Strategic Thinking, Collaboration, Communication, Problem-Solving, Leadership, Innovation, Decision Making, Motivation, Enthusiasm, Multi-Tasking, Fluent in English

WORK EXPERIENCE

Associate IT- Data Engineer   Aug '22 - Aug '23

Tata AIG   Mumbai, India

Tata AIG General Insurance Company Limited is a joint venture between the Tata Group and American International Group, Inc. (AIG) that offers a variety of insurance services in India

- **Performed data cleaning and preprocessing** on large datasets, transforming over 100,000 records to improve data quality and accuracy.
- **Developed and maintained a scalable Data Lake Project** using Apache **PySpark** and **PostgreSQL** Greenplum for efficient data storage and retrieval.
- **Implemented task scheduling and automation** using **Pentaho** to enhance data pipeline efficiency and reduce manual intervention.
- **Collaborated with Information Management teams** to understand project requirements and develop scalable data solutions within best practice coding frameworks.
- **Created and maintained data visualizations and dashboards** to facilitate data-driven decision-making and improve business insights.
- **Participated in cross-functional team meetings and project planning**, ensuring adherence to timelines and successful execution of data initiatives.

PROJECTS

UK Predictive Analysis and Anomaly Detection in Household Electric   Jun '24 - Sep '24
Power Consumption

Aston University   United Kingdom

- **Description:** Conducted an in-depth analysis of an e-commerce dataset to segment customers and identify fraudulent transactions. Employed **unsupervised learning** for customer segmentation using **K-Means clustering,** and developed a fraud detection system using **Random Forest**, **Gradient Boosting**, and **Logistic Regression**, prioritizing high recall to optimize fraud classification.
- **Tools: Python**, **Pandas**, **Seaborn**, **Matplotlib**, **Scikit-learn**, **Machine Learning techniques**.

- **Contribution:** Improved fraud detection accuracy through **exploratory data analysis (EDA)** and model evaluation, implemented effective **customer segmentation strategies** using clustering and data dictionaries, and built a high-performing fraud detection model to mitigate fraudulent activities on e-commerce platforms.**(GitHub)**

Big Data For UK Road Safety Risk Prediction for Insurance Premium Adjustments
May '24 - May '24

Aston University United Kingdom

- **Description:** Developed a hybrid **LSTM-SWT model** for **energy consumption forecasting** and **anomaly detection**, enhancing forecasting accuracy and enabling real-time management of household electricity usage. Applied **AI-driven anomaly detection** using **Isolation Forest**, **Autoencoders**, **Local Outlier Factor (LOF)**, and **One-Class SVM**, evaluated on **UCI** and **LEAD1.0** datasets.
- **Tools: Python**, **TensorFlow**, **Keras**, **Scikit-learn**, **Pandas**, **SWT**, **LSTM**, **Isolation Forest**, **Autoencoders**, **LOF**, **One-Class SVM**.
- **Contribution:** Improved **forecasting accuracy** by reducing noise and capturing complex consumption patterns, successfully detected **unusual energy usage trends**, and enabled early identification of **inefficiencies** and **faults**, contributing to **smarter energy management strategies**. **(GitHub)**

UK E-Commerce Customer Segmentation and Fraud Detection
Nov '23 - Nov '23

Aston University Birmingham, United Kingdom

- **Description:** Conducted an in-depth analysis of an e-commerce dataset to segment customers and detect fraudulent transactions. Employed **unsupervised learning** for customer segmentation using **K-Means clustering** after **data normalization** and **exploratory data analysis (EDA)**. Developed a fraud detection system using **Random Forest**, **Gradient Boosting**, and **Logistic Regression**, prioritizing high recall to optimize fraud classification, and achieved effective classification performance with **Random Forest** as the standout model.
- **Tools: Python**, **Pandas**, **Seaborn**, **Matplotlib**, **Scikit-learn**, **Machine Learning techniques**.
- **Contribution:** Improved **fraud detection accuracy** and enhanced e-commerce platform security by mitigating fraudulent transactions, implemented **data management strategies** including creation of data dictionaries and taxonomies for effective customer segmentation, and developed a scalable **fraud detection model** using ensemble methods to identify suspicious behavior patterns. **(GitHub)**

EDUCATION

Master of Science (M.S.) - Artificial Intelligence and Business Strategy
Sep '23 - Sep '24

Aston University Birmingham, United Kingdom

Aston University is ranked 22nd in the UK in the Guardian University Guide, 2023.

Achieved Distinction (70%)

Bachelor of Science in Information Technology
Jun '18 - May '20

University of Mumbai Mumbai, India

University of Mumbai is one of the oldest and premier Universities in India.It is one of the largest university systems in the world with over 549,000 students on its campuses and affiliated colleges

Achieved Distinction (8.02/10 CGPA).

Certification in Cloud and Mobile Software Engineering (GNIIT)
Jun '20 - Jun '21

National Institute of Information Technology (NIIT) Mumbai, India

NIIT Ltd is a leading global talent development corporation that offers learning and knowledge solutions across various industries.

Achieved Distinction (Graded Excellent, Equivalent to 8-10 CGPA).