Maxson Stephen Mathew

0455411395 | <u>msmmj6499@gmail.com</u> | Melbourne <u>Linkedin</u>

SUMMARY

Data Scientist with a Master of Data Science and hands-on experience in machine learning, predictive modeling, and data engineering. Proficient in Python, SQL, and cloud-based platforms (GCP, Databricks), with proven success in building scalable ML models and data pipelines. Passionate about transforming complex datasets into actionable insights and advancing AI-driven decision-making.

SKILLS

- **Programming & Tools:** Python (NumPy, Pandas, scikit-learn, TensorFlow, Keras) | R | SQL | Power BI (DAX) | Tableau | Excel | Git | GCP | PGAdmin | Unix.
- Data Engineering & Management: ETL/ELT Pipelines | Data Wrangling & Cleaning | Feature Engineering | Data Modeling (Star Schema, Normalization) | Data Governance | Power Query.
- Analytics & Machine Learning: Predictive Modeling | Supervised & Unsupervised Learning | Random Forest | Ensemble Models | LSTM | Bi-GRU | CNN | Regression | Classification | Clustering.
- Natural Language Processing (NLP): Text Classification | Tokenization & Embeddings | SMOTE for Class Imbalance | Sentiment Analysis.
- Visualization & Reporting: Power BI Dashboards | Tableau Dashboards | R Shiny Apps | Custom Reporting Automation | Statistical Charts & Insights Communication
- Statistical & Scientific Methods: Hypothesis Testing | Experimental Design | A/B Testing | Statistical Inference | Model Evaluation Metrics.
- Cloud & Data Platforms: Google Cloud Platform (BigQuery, Storage) | Databricks | Alteryx (basic exposure) | Microsoft Fabric | SQL Databases.
- Soft Skills & Collaboration: Agile & SDLC Delivery | Stakeholder Communication | Workshop Facilitation | Requirement Gathering | Technical Documentation.

PROFESSIONAL EXPERIENCE

Research Intern - HR Department John Holland Group, Melbourne

Feb 2024 - Oct 2024

- Partnered with HR stakeholders to develop data reporting solutions aligned with workforce strategy and engagement
- Conducted stakeholder interviews and discovery sessions to gather reporting requirements and align KPIs with business objectives.
- Designed and built interactive Power BI dashboards to visualize employee trends and model future workforce needs.
- Developed semantic data models and predictive simulations with 91% accuracy using Python to support planning and retention.
- Participated in Agile ceremonies and contributed to iterative delivery cycles within cross-functional teams.

Associate System Engineer

Aug 2021 - Dec 2022

Tata Consultancy Services, Bengaluru, India

- Delivered production support for high-availability banking systems, improving operational uptime by 95% through targeted log monitoring and SQL-based error detection.
- Reduced incident resolution time by 40% through process optimisation and change management on ServiceNow.
- Improved rollback rate by 25% during quarterly releases by debugging and resolving critical incidents.
- Facilitated collaboration across development, QA, and business units, improving stakeholder communication.

EDUCATION

Master of Data Science Feb 2023 - July 2025

The University of Melbourne, Parkville, Melbourne

• Relevant Coursework: Advanced Machine Learning, Deep Learning, Cloud Computing, database management, GIS, Spatial data management and analysis.

- Delivered multiple end-to-end data projects in team environments, balancing technical execution with stakeholder engagement and communication.
- Led collaborative efforts in group assignments, managing timelines, delegating tasks, and ensuring successful delivery aligned with project goals.
- Presented project outcomes to academic and industry mentors, translating complex analytical findings into clear, actionable insights.

Bachelor of Technology - Computer Science

Aug 2017 - Jul 2021

Guru Gobind Singh Indraprastha University, Delhi, India

• ASL to Text Conversion Web App: Developed a real-time American Sign Language (ASL) interpreter by training a CNN model using OpenCV and Keras, then deploying it via a Flask-based web app to convert hand gestures into text through a user-friendly interface.

PROJECTS

Vulnerable Drivers in Victoria - Tableau Dashboard

July 2024 - Nov 2024

Academic Individual Project | University of Melbourne

- Designed an interactive Tableau dashboard visualising road accident data for vulnerable road users in Victoria.
- Showed year-on-year trends segmented by severity and age group across drivers, passengers, pedestrians, and two-wheeler riders.
- Integrated spatial visualisation of accident locations with interactive filters, enabling demographic and temporal insights.
- Supported public safety decision-making through demographic-driven analytics.

Classifying AMI and Troponin Level - Machine Learning with MIMIC-IV

Jul 2024 - Nov 2024

Academic Group Project | University of Melbourne

- Designed an ETL pipeline in Python to extract and clean clinical data for predicting AMI using troponin biomarkers.
- Performed statistical testing, imputation, class balancing, and built classification models (Random Forest, KNN).
- Infarction (AMI) based on troponin levels using the MIMIC-IV dataset.
- Identified troponin's predictive value while addressing challenges with overlapping class distributions.
- Achieved highest model performance using Random Forest, offering insights into biomarker-driven diagnosis.

Human vs. AI Text Classification – Machine Learning & NLP

Feb 2024 – June 2024

Academic Group Project | University of Melbourne

- Built a binary text classifier to distinguish human-written vs AI-generated responses using NLP and ML techniques.
- Tackled **class imbalance** using **SMOTE**, improving minority class representation and overall model generalizability.
- Trained and compared multiple models including LSTM, Bi-GRU, Random Forest, and stacked ensemble
 classifiers
- Achieved 95% accuracy using an ensemble model, outperforming individual deep learning approaches.
- Evaluated models using precision, recall, F1-score, and confusion matrices ensured reproducibility with Python (TensorFlow, scikit-learn).

PROFESSIONAL CERTIFICATIONS

- Deloitte Australia Data Analytics Job Simulation through Forage.
- AIG Actuarial Analyst Job Simulation through Forage.
- Machine Learning, Data Science and Deep Learning with Python: Udemy.