SAMUEL DSOUZA

Mumbai, Maharashtra | +91 9152667197 | sjdsouza10@gmail.com | <u>LinkedIn</u>

SUMMARY

Final-year Computer Engineering student with expertise in data analytics, visualization, and reporting. Skilled in Python, SQL, Power BI, Tableau, and Excel for extracting insights, optimizing workflows, and supporting data-driven decisions. Experienced in designing dashboards, analyzing large datasets, and presenting actionable findings to stakeholders. Known for attention to detail, problem-solving, and a strong analytical mindset.

PROJECT EXPERIENCE

AICTE Approval Portal - *Project Lead & Developer*
Smart India Hackathon 2024 Finalist

- **Automated document approval workflow** and generated deficiency reports using **AutoML**, **Reinforcement Learning**, and NLP, reducing manual review time by 50% and delivering actionable insights for institutions.
- Deployed **YOLO-based inspection system**, reducing physical audits by **80%** and improving compliance accuracy.
- Built **OCR pipeline** with **Tesseract + OpenCV** achieving **92% accuracy** on blueprint data extraction.
- Drafted technical documentation and data flow diagrams to ensure smooth handoff and scalability.

Epilert - Epilepsy Detector and Tracker - *Developer*

- Processed **500,000+ EMG signals**, reducing ETL pipeline latency by **15%** for real-time health monitoring.
- Deployed 2D CNN seizure detection model, boosting accuracy by **12%** and ensuring reliable risk alerts.
- Built live analytics dashboard, enhancing transparency for patients and doctors through clear data-driven insights.
- Integrated AWS S3, EC2, and DynamoDB for secure cloud storage and scalable infrastructure.

Fraud Detection Model - *Developer*

- Designed ML pipeline with **SMOTE** for class imbalance, achieving **93% accuracy** and **94% precision.**
- Engineered features and preprocessed data, boosting fraudulent transaction precision to **88%.**
- Evaluated using precision, recall, and f1-score, with **0.94 f1-score** for both classes, ensuring balanced and effective fraud detection.

TECHNICAL SKILLS

- **Python** for Data Science and Machine Learning
- **MS Excel, PowerBI** and **Tableau** for data analysis and reporting
- **SQL, Pandas, Scikit-learn, NLP**
- **S3, EC2, DynamoDB -** AWS Technologies

CERTIFICATIONS

- Google Cloud Data Analytics - Google
- AWS Academy Cloud Architecting - AWS Academy Graduate
- AWS Academy Cloud Data Pipeline Builder - AWS Academy Graduate
- Data Analytics Job Simulation - Deloitte Australia

EDUCATION

Fr. Conceicao Rodrigues College of Engineering	**Mumbai, Maharashtra**
B.E., Computer Engineering (Hons. in Data Science) (CGPA 8.67/10)	*2022 - 2026*
St. Xavier's College	**Mumbai, Maharashtra**
HSC (78.3%)	*2020 - 2022*