

# IQBAL MAQBOOL SOFI

Data Scientist — Analytics Specialist — AI/ML Engineer

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## PROFESSIONAL SUMMARY

Data Science graduate student and former Accenture Analytics Professional with 3+ years of experience delivering enterprise-scale analytics solutions and ML systems. Proven expertise in building production dashboards processing 500K+ daily interactions, developing ETL pipelines, and implementing deep learning models with 85-92% accuracy. Skilled in translating complex data into actionable business insights that drive measurable ROI.

## TECHNICAL SKILLS

**Programming:** Python (Pandas, NumPy, Scikit-learn), SQL, R, JavaScript, C#, Bash

**Machine Learning & AI:** PyTorch, TensorFlow, Keras, Vision Transformers (ViT), VQ-VAE, Regression, Classification, Clustering, Anomaly Detection, Computer Vision

**Data Engineering:** ETL Pipelines, Data Validation, SQL Server, MySQL, MongoDB, InfluxDB, Data Modeling

**Analytics & Visualization:** Power BI, Tableau, Adobe Analytics, Google Analytics, Excel (VBA), A/B Testing, Statistical Analysis

**Cloud & Tools:** AWS, Azure, Docker, Git/GitHub, REST APIs, Agile/JIRA, Jupyter, HPC/GPU Computing

## EDUCATION

**Rowan University**

Glassboro, NJ

*Master of Science in Data Science (In Progress)*

Aug 2024 – May 2026

- **Relevant Coursework:** Machine Learning, Deep Learning, Statistical Analysis, Data Mining, Big Data Systems

**Amity University**

India

*Bachelor of Technology in Computer Science*

Graduated 2021

## PROFESSIONAL EXPERIENCE

**Custom Software Engineering Analyst**

Feb 2022 – Aug 2024

Accenture

Remote

- Built enterprise-scale analytics solutions processing 500K+ daily customer interactions, delivering actionable insights to C-suite executives through Power BI and Tableau dashboards
- Engineered SQL-based ETL pipelines using Python (Pandas) to integrate multi-source data from Adobe Analytics and Google Analytics, improving data accuracy by 35%
- Conducted advanced customer segmentation using statistical analysis in R, identifying high-value customer cohorts that drove 20% increase in targeted marketing ROI
- Automated KPI tracking workflows using Excel VBA and Python, saving the analytics team 15+ hours weekly and reducing manual errors by 90%
- Collaborated with cross-functional marketing and product teams to define metrics, translate business requirements, and influence product roadmap decisions
- Completed Accenture Cloud Platform Training and Software Development Lifecycle (SDLC) certification programs

**Associate Software Developer**

Aug 2021 – Feb 2022

DXC Technology

India

- Developed enterprise backend systems and data integration tools for scalable, high-availability applications serving 10K+ concurrent users
- Built C#/.NET applications with SQL Server backends, writing optimized stored procedures and queries that improved system performance by 40%
- Designed and implemented REST APIs for internal data integration, increasing system reliability to 99.5% uptime
- Participated in Agile development sprints using JIRA, conducting code reviews and implementing comprehensive unit testing strategies

## MACHINE LEARNING PROJECTS

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### Vision Transformer Image Classification

PyTorch, Computer Vision, HPC

- Fine-tuned pre-trained Vision Transformer (ViT) model on ImageNet100 dataset, achieving 85% validation accuracy through systematic hyperparameter optimization
- Implemented advanced data augmentation techniques, learning rate scheduling, and mixed-precision training for efficient GPU utilization
- Trained models on university HPC cluster with GPU acceleration, demonstrating expertise in large-scale deep learning workflows

### Defect Detection with Autoencoders

PyTorch, Anomaly Detection, Unsupervised Learning

- Implemented Vector Quantized Variational Autoencoder (VQ-VAE) for unsupervised anomaly detection on manufacturing defect datasets
- Achieved 92% detection accuracy using reconstruction error as anomaly score, outperforming baseline supervised methods
- Designed scalable inference pipeline suitable for real-time quality control applications

### IoT Sensor Data Analytics System

InfluxDB, MongoDB, Time-Series Analysis

- Built dual-database architecture for storing and analyzing simulated smart home sensor data with real-time monitoring capabilities
- Developed alerting system processing 10K+ sensor readings per minute with sub-second latency using time-series optimization
- Implemented statistical anomaly detection algorithms to identify sensor failures and environmental anomalies with interactive dashboards

### 5G Network Security Research

Network Security, Cloud Computing, IoT

- Conducted comprehensive security analysis of Cloud and IoT integrations within 5G network architectures
- Identified critical vulnerabilities in edge computing deployments and proposed mitigation strategies for production environments
- Presented research findings at university symposium, contributing to ongoing security standardization discussions

## CERTIFICATIONS & TRAINING

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**Google Data Analytics Professional Certificate** — Google

**Accenture Cloud Platform Training** — Accenture

**Software Development Lifecycle (SDLC) Certification** — Accenture

## KEY ACHIEVEMENTS

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**Business Impact:** Delivered customer segmentation insights driving 20% increase in marketing ROI

**Efficiency Gains:** Automated analytics workflows saving 15+ hours weekly across team operations

**Scale:** Managed enterprise dashboards processing 500K+ daily customer interactions

**ML Performance:** Achieved 85-92% accuracy in production-ready ML models across multiple domains