

MUHAMMAD ADNAN

Data Scientist | Machine Learning Engineer

✉adnank75586@gmail.com | +92-319-9398845 | Shamsabad, Rawalpindi

[Github](#) | [Linkedin](#) | [Portfolio Website](#)

PROFESSIONAL SUMMARY

Computer Science graduate with hands-on experience in Data Science, Machine Learning, Deep Learning, SQL, and Power BI. Currently working as a Data Scientist at DevRolin, building end-to-end AI-powered SaaS platforms, predictive models, and business intelligence dashboards using Python, FastAPI, Next.js, TensorFlow, and Power BI. Passionate about solving real-world problems through data-driven solutions.

TECHNICAL SKILLS

Programming & Libraries

Python • NumPy • Pandas • Matplotlib • Seaborn • Scikit-learn

Deep Learning Frameworks

TensorFlow • Keras • OpenCV • CNN • Transfer Learning • NLP • SHAP

Web & SaaS Development

FastAPI • Next.js • REST APIs • React Native • Django • Firebase • Docker

Database & BI

MySQL • SQL • Power BI • DAX • Data Modeling

Machine Learning

Regression • Classification • Clustering • Ensemble Methods • AutoML

Core Competencies

Feature Engineering • Model Evaluation & Tuning • Statistical Analysis

Tools & IDEs

Jupyter Notebook • VS Code • Git • Power BI Desktop

EXPERIENCE

Data Scientist DevRolin

Apr 2026 – Present

- Working as a Data Scientist, contributing to data analysis, model development, and reporting workflows using Python, SQL, and machine learning tools.
- Collaborating with the team on data-driven solutions, applying statistical analysis and predictive modeling to support business decisions.

Business Associate Scroll'n Ecom — Rawalpindi, Pakistan

Jan 2025 – Apr 2026

- Founded and managed an e-commerce startup, overseeing end-to-end business operations including product sourcing, online store management, digital marketing, and customer relations.
- Gained hands-on entrepreneurial experience in building and scaling an online business, including data-driven decisions around pricing and marketing spend.

PROJECTS

1. AI-Based Fertilizer Deficiency Monitoring Application (Final Year Project)

Model Used: Convolutional Neural Network (CNN – MobileNetV2 Transfer Learning) + Image Processing (OpenCV)

Platform: React Native (Mobile App) | Firebase (Authentication) | Django (Backend & Database)

GitHub: github.com/MuhammadAdnan586/Fertilizer_Deficiency_Detection

- Developed an AI-powered mobile app for real-time detection of Nitrogen, Phosphorus & Potassium (NPK) deficiencies in rice and maize leaf images for precision agriculture.
- Built an integrated dosage calculator with live fertilizer price suggestions to turn detections into actionable treatment recommendations.
- Implemented the full pipeline end-to-end: Firebase authentication, image capture, CNN inference, and a Django REST backend.

2. Age & Gender Prediction System

Model Used: CNN with Transfer Learning (VGG16 / ResNet50)
Accuracy: Age Estimation MAE: ~5 years | Gender Classification: ~92% accuracy
GitHub: github.com/MuhammadAdnan586/Age-and-Gender-Prediction

- Trained a deep learning model on facial datasets achieving ~92% gender classification accuracy and ~5-year MAE for age estimation.
- Applied data augmentation and batch normalization to improve generalization across diverse facial images.
- Extended the system with a bonus food-recommendation feature based on the predicted age and gender.

3. AI-Powered AutoML SaaS Platform

Tech Stack: FastAPI, Next.js 14, Python, SHAP, Gemini API, Docker
GitHub: github.com/MuhammadAdnan586/AI-Powered-AutoML

- Built a full-stack SaaS platform that automatically trains and benchmarks 7 machine learning models per uploaded dataset, ranking them on a live leaderboard.
- Integrated SHAP explainability, an AI chatbot, automated data-quality analysis, and one-click PDF/Excel report generation.
- Containerized the platform with Docker and added a no-code API generator with role-based access control (RBAC) for production deployment.

4. Customer Intelligence & Revenue Optimization System

Tech Stack: MySQL, SQL, FastAPI, Next.js, Recharts, Power BI
Dataset: Olist Brazilian E-commerce Dataset
GitHub: github.com/MuhammadAdnan586/Customer-Intelligence-Revenue-Optimization

- Built a SQL-driven analytics platform answering four core business questions: RFM customer segmentation, cohort retention, product affinity, and revenue leakage.
- Designed an interactive web dashboard with FastAPI, Next.js, and Recharts, complemented by Power BI for deeper analysis.

5. AI-Powered Interview Readiness Platform

Tech Stack: FastAPI, NLP, Speech-to-Text, AI, SaaS
GitHub: github.com/MuhammadAdnan586/interview-platform

- Designed a SaaS platform that parses uploaded CVs to generate personalized interview questions tailored to each candidate's background.
- Built real-time body language and voice analysis to automatically score candidates on content, tone, and confidence.
- Generated detailed PDF readiness reports to help candidates identify and improve weak areas before real interviews.

6. Sales Dashboard (Power BI)

Tools Used: Power BI, DAX
GitHub: github.com/MuhammadAdnan586/Sale_Dashboard

- Built an end-to-end Power BI dashboard tracking 11M PKR in revenue with a 29.59% profit margin across regions.
- Designed DAX-driven measures for regional performance and trend analysis to support data-informed sales decisions.

7. Financial Analytics Dashboard (Power BI)

Tools Used: Power BI, DAX
GitHub: github.com/MuhammadAdnan586/Financial-Analytics-Dashboard-

- Built a Power BI dashboard analyzing 28M PKR in revenue with a 69.40% profit margin and budget variance across departments.
- Created DAX calculations to support financial decision-making and departmental performance tracking.

EDUCATION

B.Sc. Computer Science Pir Mehr Ali Shah Arid Agriculture University, Rawalpindi CGPA: 3.46 / 4.0	2022 – 2026 <i>Completed</i>
F.Sc. Pre-Engineering Zubair Public School & College, Dera Ismail Khan Grade: A Grade	Completed 2022

CERTIFICATIONS

Data Science Orientation — IBM	18 November 2025
---------------------------------------	-------------------------