Umair Inayat

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OBJECTIVE

Software Engineer with expertise in **Machine Learning**, **Deep Learning**, and **Large Language Models**. Skilled in **PyTorch**, **TensorFlow**, and modern **ML frameworks** for building **AI applications**, **mobile apps**, and **computer vision systems**. Proven track record in competitive programming and research with top ML competition rankings.

EDUCATION

University of Management and Technology — **Lahore, Pakistan**
Bachelor of Science in Computer Science, GPA: 3.82 — *2022 – 2026*

- Merit Awards: Fall 2023 (Dean Award) & Fall 2024 (Rector Award). Coursework: Data Structures, ML/DL, SE, NLP, Database, OS

EXPERIENCE

AI/ML Intern — **Jul 2025 – Sep 2025**
Texense (Remote) — *Lahore, Pakistan*

- Contributed to **AI/ML solutions** for production-level projects with emphasis on **scalability** and practical implementation. Collaborated across teams to develop **intelligent systems** and strengthened core ML skills in **model development**, **optimization**, and **deployment**

Teaching Assistant — **Mar 2024 – Present**
University of Management and Technology — *Lahore, Pakistan*

- Assisted in teaching **OOP**, **Data Structures**, **Database**, **ML/DL**, **OS**, and **Automata**, supporting 100+ students and mentoring in complex programming concepts and project development

SKILLS

Languages: C++, Python, JavaScript, HTML, CSS, SQL
Frameworks/Libraries: PyTorch, TensorFlow, Keras, Hugging Face, Django, FastAPI, Flask, LangChain, LangGraph
ML/AI Tools: Deep Learning, NLP, Computer Vision, Data Science, Generative AI, Model Quantization
Development Tools: Git, GitHub, VS Code, Jupyter, Google Colab, SQLite, PostgreSQL
Soft Skills: Team Collaboration, Problem Solving, Research, Leadership, Communication, Project Management

PROJECTS

Research Paper Analyzer | *Django, Python, LangChain, Groq API, PostgreSQL* — **2025**

- Built **AI-powered web app** integrating **ArXiv**, **Google Scholar**, **PubMed**, **IEEE** for comprehensive paper search and analysis with **LangChain** and **Groq API** for methodology and impact assessment

Multimodal AI Text Detection with XAI | *Python, PyTorch, RoBERTa, LIME, SHAP* — **2025**

- Developed **XAI framework** achieving **98.4% binary** and **86.8% 12-class accuracy** by combining **RoBERTa embeddings** with stylometric features and integrated **LIME**, **SHAP**, **Captum** for explainability

EmotiEase: Mental Health Mobile App | *Flutter, Python, FastAPI, LLaMA 2* — **2025**

- Created **Flutter app** with personalized **AI chatbot**, fine-tuned **LLaMA 2** on therapist-client data and **quantized** for efficient deployment

Mental Illness Detection Research | *Python, PyTorch, QLoRA, LLaMA 2* — **2025**

- Enhanced model accuracy from **85% to 93%** using **QLoRA fine-tuning** on **LLaMA 2** for Reddit post analysis

Satellite Imagery Object Detection | *YOLO, Computer Vision, Python* — **2024**

- Implemented **YOLO models** (v3, v5, v8, v11) on NESA dataset, improving SOTA performance by **3%** through optimization

Machine Translation with Transformers | *Python, PyTorch, Attention Mechanism* — **2024**

- Implemented **Transformer architecture** from scratch based on "Attention is All You Need" paper

AWARDS & ACHIEVEMENTS

TechnoVerse Comsat ML Competition (2025): 3rd Position - 66 tree species classification with 118k instances
SofTech ML Competition (2025): 4th Position - Hospital readmission prediction among 30 teams
Academic Excellence: Merit Awards Fall 2023, Fall 2024 & Spring 2025, GPA: 3.82/4.0

CERTIFICATIONS

Machine Learning Specialization - Coursera (Andrew Ng) | Deep Learning Specialization - Coursera | Data Scientist in Python - DataCamp | MLOps Bootcamp with 10+ End-to-End ML Projects