# MUHAMMAD YOUSAF RANA

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# OBJECTIVE

Machine Learning Engineer with hands-on experience in MLOps, deep learning, and NLP, seeking a full-time role to build scalable AI systems and deploy production-grade ML pipelines.

## EDUCATION

Bachelor of Science in Software Engineering, UET Taxila2021 - 2025CGPA: 3.40/4.0(Graduation: June 2025)Relevant Coursework: Machine Learning, Deep Learning, Computer Vision, Data Science, Software Development

#### SKILLS

Languages & Frameworks	Python, TensorFlow, Keras, Scikit-Learn, FastAPI, Flask, Streamlit
ML/DL Tools	Hugging Face, NVIDIA NeMo, Weights & Blases (wandb), CometML
MLOps & DevOps	Git, Docker, GitHub Actions, Conda, Codespaces
Cloud Platforms	AWS (SageMaker Studio Lab, Cloud9, AppRunner, ECR, S3), Google Colab
IDEs	VS Code, PyCharm, Jupyter Notebook
Soft Skills	Problem-Solving, Leadership, Communication, Teamwork

## EXPERIENCE

ML Engineer Intern – EZITECH, Aug 2024 – Nov 2024: Boosted model accuracy by 10% via data cleaning, feature engineering, and implementing deep learning models (CNNs, RNNs) using TensorFlow.

**Data Science Intern** – **Digital Empowerment Network, Jul 2024** – **Aug 2024:** Led a 3-member team to optimize anomaly detection models (Isolation Forest, Autoencoders), reducing false positives by 15%.

**Data Science Intern** – **InternCraft, Jul 2024** – **Aug 2024:** Built a house price predictor (XGBoost, 92% R<sup>2</sup>) and performed customer segmentation via RFM analysis.

## PROJECTS

Summedify – Multimedia Summarization (FYP): Built an end-to-end system using LLaVA-Next-Video-7B, Whisper, and NLLB-200 for summarizing, transcribing, and translating text, audio, and video. Deployed multilingual FastAPI-based APIs.

CI/CD MLOps Pipeline on AWS, Azure & Hugging Face: Designed a full ML pipeline with automated training, deployment, and monitoring using SageMaker, Azure ML, and Hugging Face Hub.

**Medical Paper Classifier:** Developed a TensorFlow NLP model to classify sections (e.g., Abstract, Methods) in medical research papers.

FoodVision 101: Trained an EfficientNet-based model to classify 101 food categories with high accuracy.

**Speech-to-Text ASR System:** Fine-tuned and deployed an ASR model using NVIDIA NeMo and Streamlit for real-time transcription.

# CERTIFICATIONS

- Machine Learning Specialization Stanford University DeepLearning.AI (Taught by Andrew Ng)
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- MLOps Specialization Duke University (via Coursera)
- Natural Language Processing (NLP) Certification NVIDIA