MUNEEB UL HASSAN

Artificial Intelligence | Machine Learning

Mail: mulhassan146@gmail.com Phone: 92 318 7813997 Website: Visit Website LinkedIn: Muneeb Ul Hassan

PROFESSIONAL SUMMARY

Machine Learning Engineer with expertise in deep learning, NLP, and LLMs, experienced in end-to-end model development and deployment. I am proficient in Python, Sklearn, TensorFlow, Hugging Face, and OpenAI APIs. With hands-on expertise in building and deploying scalable ML solutions using Docker, AWS (EC2, ECR), and GitHub Actions and CI/CD pipelines. Passionate about solving real-world problems through AI, in both research-driven and production-grade projects.

SKILLS & TECHNOLOGIES

Programming Languages: Python, R, C/C++

Frameworks & Libraries: TensorFlow, Keras, PyTorch, NumPy, Pandas, Scikit-Learn, Seaborn

Deep Learning: Neural Networks, CNN, RNN, LSTM, Transformers, Transfer Learning

GenAI: LLMs fine-tuning, RAG, Langchain, Llama Index

MLOps: Docker, CI/CD (GitHub Actions), AWS (EC2, ECR), MLflow, DagsHub

Soft Skills: Problem-Solving, Critical Thinking, Attention to Detail, Collaboration, Research

PROFESSIONAL EXPERIENCE

Machine Learning Engineer

Freelance (June 2022 – Present)

- Built classification models for weather prediction, achieving 89% accuracy with SVC and Logistic Regression.
- Utilized advanced techniques like feature scaling, ensemble methods, and EDA to enhance model performance and extract insights.
- Created and trained a custom reinforcement learning agent for maze navigation, achieving 100% success rate and reducing episode length from 600 to 15-20 steps across 50,000 episodes (95% improvement).

Machine Learning Intern

Glowingsoft Technologies (July 2023 - August 2023)

- Designed and optimized machine learning models for predictive analytics, including data scraping from electronic stores and building classification, regression, and sentiment analysis models using natural language processing (NLP) techniques.

NOTABLE PROJECTS

AI-Driven Cultural Classification System (Research Project)

Designed a deep learning model for visual data classification, achieving 85% accuracy using transfer learning and advanced neural networks based ResNet50 to solve challenges in heritage preservation and e-commerce personalization.

Technologies: ResNet50, Inception, MobileNet, TensorFlow, Transfer Learning

End-to-End Email Summarization API on AWS

Built and deployed an Email Summarization pipeline using DistilBART and FastAPI, with automated CI/CD for seamless delivery.

Technologies: DistilBART, FastAPI, AWS (EC2, ECR), Docker, GitHub Actions, CI/CD

VGG16-Powered Aerial Threat Detection

Designed a deep learning-based vision system using VGG16 for real-time bird vs drone detection to enhance airport safety.

Technologies: VGG16, TensorFlow/Keras, Streamlit, Transfer Learning, Python, Computer Vision

EDUCATION

Bachelor of Industrial Engineering
University of Engineering and Technology, Taxila, Pakistan *2020 - 2024*

CERTIFICATIONS

- Machine Learning Specialization (Stanford University /Coursera)
- Deep Learning Specialization (DeepLearning.AI /Coursera)
- Reinforcement Learning Specialization (University of Alberta /Coursera)