Mishal Ashraf

Multan, Pakistan | +923067451671 | mishal7991@gmail.com

Profile Summary

Machine Learning Engineer with 2+ years experience in building and optimizing machine learning models for academic projects. Proficient in Python and libraries such as TensorFlow, PyTorch, and Scikit-learn. Strong research background in AI with a focus on multiagent systems. Skilled in feature engineering, model optimization, and data processing with hands-on experience in both supervised and unsupervised learning.

Education

MS in Artificial Intelligence – National University of Science and Technology (NUST), Islamabad
09/2021 – 10/2024 | 3.4 CGPA
- Relevant coursework: Machine Learning, Deep Learning, Natural Language Processing
BSc. in Computer Engineering – Bahauddin Zakariya University, Multan
09/2015 – 07/2019 | 3.1 CGPA

Technical Skills

- **Programming Languages**: Python
- **Libraries/Frameworks:** TensorFlow, PyTorch, Scikit-learn, Pandas, NumPy, Matplotlib, Seaborn
- **Machine Learning:** Supervised and unsupervised learning, feature engineering, data preprocessing, model training and evaluation
- **Deep Learning:** Neural networks, convolutional neural networks (CNNs), recurrent neural networks (RNNs), transformers, transfer learning, fine-tuning, model optimization and evaluation

Research and Work Experience

Research Student
TUKL Lab, NUST – Islamabad | 11/2023 – 10/2024
- Developed a multi-agent system for automating legal text summarization using CrewAI, with automated evaluation through ROUGE and BERT Score.
- Conducted human-centered evaluation to ensure the accuracy and relevance of the summaries.

Online Tutor
Preply | 07/2022 – Present
- Tutor students in artificial intelligence, focusing on coursework related to machine learning and deep learning.

Lab Manager
NCAI Deep Learning Lab, NUST – Islamabad | 06/2022 – 08/2023
- Managed undergraduate summer internships, providing guidance on machine learning projects.
- Presented lab projects to visitors, showcasing advancements in machine learning and AI technologies.

Projects

- Customer Service Requests Analysis
- Smartphone Price Prediction
- Predictive Analytics for Employee Turnover
- Finetuning BERT (both base-cased and uncased versions) to perform Named Entity Recognition (NER) on legal judgments.
- Finetuning Longformer Encoder-Decoder (LED) models for summarization of legal judgments.
- Automating Legal Text Summarization with Multi-Agent Systems and Human-Centered Evaluation.

Certifications

- Programming for Everybody (Getting Started with Python) (Coursera)
- Python Data Structures (Coursera)
- Machine Learning Specialization (Coursera)
- Structuring Machine Learning Projects (Coursera)
- Neural Networks and Deep Learning (Coursera)
- Improving Deep Neural Networks: Hyperparameter Tuning, Regularization and Optimization (Coursera)
- Sequence Models (Coursera)
- NLP Course (Hugging Face)
- Generative AI with Large Language Models (Coursera: In Progress)
- Building AI Agents (Campus X)
- Multi AI Agent Systems with crewAI (DeepLearning.AI)