FAHAD UL HASSAN ASIF MATTOO

Machine Learning Engineer

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EXPERIENCE

Machine Learning Engineer
D-Cube Tech

📅 August 2023 - Present   📍 Islamabad, Pakistan

- **Large Language Models:** Utilized llama2 7b model for analysis, assessed diverse quantization methods, and facilitated deployment via FastAPI.

Research Assistant
Robot Design & Development Lab, NCRA, NUST

📅 November 2022 - July 2023   📍 Rawalpindi, Pakistan

- **Machine Learning:** Human interaction Recognition, Human Activity Classification, and Solved a regression-based optimization problem for MEMS sensor using ML & DL approaches.
- **Dataset Collection:** Collected a Data-set for human activity recognition from a drone at multiple angles.

Junior Data Scientist
PackageX

📅 September 2021 - August 2022   📍 Islamabad, Pakistan

- **Deep Learning:** Trained, Labelled, Evaluated, and Deployed a BERT based layout model for Named Entity Recognition (NER).
- **On-Device:** Research and Bench-marked on-device OCR models (Apple-Vision, Google-ML kit) on Apple devices.
- **Data Analytics:** Applied Exploratory data & trends analysis on customer activity data to obtain useful insights.

ACADEMIC PROJECTS

Development of Robust Action Recognition Framework Using Pose Information
Masters Thesis

- Proposed a Deep learning model for pose classification.
- Proposed framework that can recognize multi-person individual activity recogntion.
- Utilized Yolov7-Pose for pose estimation and SORT for tracking of individuals.
- Evaluated the framework on 16 different datasets and benchmarked the pose classification model on 3 three different datasets.
- Achieved SOTA results for pose classification.

PUBLICATIONS

Deep Learning Based Multiresponse Optimization Methodology for Dual-Axis MEMS Accelerometer
Journal - micromachines (MDPI)

📅 4 April 2023

Deep Learning-based Feature Fusion for Action Recognition using skeleton Information
Conference - ICRAI (IEEE)

📅 3-5 March 2023

CAREER OBJECTIVE

Experienced ML engineer and researcher with a strong foundation in computer vision, NLP, and on-device deployment. Seeking a challenging role to drive innovation and conduct impactful research for the organization's growth. With 2 years of experience, a background as a data scientist, and recent publications, I possess strong analytical skills and a passion for staying current with AI developments.

EDUCATION

M.Sc. Mechatronics Engineering
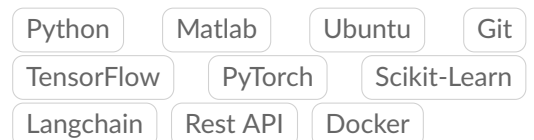**College of Electrical & Mechanical Engineering (CEME), NUST.**

📅 Sep 2019 – April 2023

B.Sc. Mechanical Engineering
Ghulam Ishaq Khan Institue of Engineering Sciences and Technology (GIKI)

📅 Aug 2014 – June 2018

SKILLS

Python   Matlab   Ubuntu   Git
TensorFlow   PyTorch   Scikit-Learn
Langchain   Rest API   Docker

CERTIFICATES

Neural Network and Deep Learning
📅 Coursera 05, 2021

AI For Everyone
📅 Coursera 01, 2021

Stanford Machine Learning
📅 Coursera 11, 2020

HOBBIES

Photography   Video Games   Anime
Manga   Travelling