Muhammad Mohsin

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https://www.linkedin.com/in/mohsin-ee/ | Github: https://github.com/Mohsin-424

EDUCATION AND TRAINING

2020 - 2024

BSC. ELECTRICAL ENGINEERING University of the Punjab

WORK EXPERIENCE

06/2024 - 07/2024

STEM INSTRUCTOR STEAM GENIUS CLUB

Worked as a STEM instructor in collaboration with the Pakistan Air Force, teaching Lego Robotics, Arduino Robotics, Python Programming, and Al.

EMBEDDED SYSTEM ELECTRONICS ENGINEER MUSLIM SCIENTIFIC CORPORATION

Programmed Raspberry Pi (4B) and PIC (18F4520) microcontrollers to build various projects

25/06/2024 - 25/09/2024

PYTHON PROGRAMMING INTERN CODE ALPHA

Utilized Python libraries (OpenCV, TensorFlow, PyTorch) for real-time image processing and ML/DL projects in image classification and object detection

10/08/2023 - 10/11/2023

ASSOCIATE SOFTWARE DEVELOPER REX TECHNLOGIES

Worked with Angular for front-end, MySQL for databases, and Flask (Django) for backend development, creating websites for electronics and e-commerce applications.

15/08/2021 - 10/10/2022

EMBEDDED SYSTEMS ELECTRONICS ENGINEER ELEKTRONIK2000

Programmed microcontrollers, including ESP8266/ESP32, Raspberry Pi, and Arduino, integrate various sensors for diverse applications.

18/12/2023 - 24/02/2024 Lahore, Pakistan

AMAL FELLOWSHIP AMAL ACADEMY

Amal Fellowship: Enhanced leadership, communication, and networking skills through focused career development training.

PROJECTS

Multimodal Orthopedic Health assessment | Trigger point pain analysis through Deep Learning and Computer Vision

A system for comprehensive diagnostics by analyzing trigger point pain, gait, plantar pressure, body pose, and angles.

Link https://github.com/Mohsin-424/Al-Projects

Gait Analysis and Abnormality Detection System using Deep Learning and Computer Vision

A system that detects cerebral palsy (deformity) for medical diagnosis and rehabilitation using computer vision.

Link https://github.com/Mohsin-424/Al-Projects

Green Wheelz | Smart Electric cycle rental system with geo-fenced protection

Green Wheelz offers a smart electric cycle rental system with IoT-powered geo-fencing for enhanced user safety and security

Link https://github.com/Mohsin-424/IOT-Project

VOLUNTEERING

17/05/2024 - 19/05/2024

Artificial Intelligence in Medical Images

Conducted a 3-day workshop on AI in medical images (bioimage analysis).

Volunteer STEM Skills Instructor

I teach Arduino, Lego robotics, and block-based Python programming to poor and deserving students.

Amal Ambassadorship

Fundraising for Akhuwat Foundation

DIGITAL SKILLS

Deep Learning | Computer Vision | Embedded Systems (Internet of Things)) | LaTex: used for documents preparation (e.g. reports and presentations). | Microsoft Office (Outlook, Excel, Word, PowerPoint) | Natural language Processing | SQL

CERTIFICATION

Al in Heathcare Specialization: Stanford University (Coursera)

Machine Learning Specialization: Stanford University (Coursera)

Programming the Internet of Things (University of California UCI, Irvine):(Coursera)

Industrial Automation: National Vocational and Technical Training Commission (NAVTTC)

CONFERENCES AND SEMINARS

17/05/2024 - 19/05/2024 University of the Punjab, Pakistan

Artificial Intelligence in Medical Images

13/05/2022 Online

Advancements in Natural Language Processing and Chatbot Technologies

LANGUAGE SKILLS

Mother tongue(s): **PUNJABI**

Other language(s):

| | UNDERSTANDING | | SPEAKING | | WRITING |
|---------|---------------|---------|--------------------------------------|----|---------|
| | Listening | Reading | Spoken production Spoken interaction | | |
| URDU | C1 | C2 | C1 | C2 | C2 |
| ENGLISH | C2 | C2 | C2 | C2 | C2 |

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

RECOMMENDATIONS

Engr. Dr. Danish Arif

Assistant Professor at the Institute of Electrical, Electronics and Computer Engineering University of the Punjab, Pakistan. (Quaid-e-Azam Campus)

Email danish.ee@pu.edu.pk | Phone (+92) 3224460966

Engr. Dr. Kamal Shahid

Assistant Professor at the Institute of Electrical, Electronics and Computer Engineering University of the Punjab, Pakistan. (Quaid-e-Azam Campus)

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