

## **Faisal Mehrban**

Nationality: Pakistani Date of birth: 11/06/2001 Gender: Male

**Caree Service Servic** 

in LinkedIn: https://www.linkedin.com/in/faisal-mehrban/

• Home: Alvi Park, 37250 Jaranwala (Pakistan)

#### **ABOUT ME**

**Dedicated and innovative Mechanical Engineer** with practical experience from internships and academic projects. Developed a Final Year Project on a Robotic Spindle to enhance industrial automation using Machine Learning for process optimization. Skilled in applying Machine Learning to address complex engineering problems, including predictive maintenance, quality control and failure analysis.

#### **EDUCATION AND TRAINING**

## **Mechanical Engineering**

University of Engineering and Technology Lahore [ 04/09/2021 - Current ]

City: Lahore | Country: Pakistan | Website: https://www.uet.edu.pk/ | Level in EQF: EQF level 6

## **Intermediate FSC (Pre-Engineering)**

**Punjab College Jaranwala Campus** [ 12/08/2018 - 06/03/2020 ]

City: Jaranwala | Country: Pakistan | Website: <a href="https://pgc.edu/campus/jaranwala/">https://pgc.edu/campus/jaranwala/</a> | Level in EQF: EQF level 3

## **WORK EXPERIENCE**

## **Summer Internship**

Pakistan Aeronautical Complex Kamra [ 03/06/2024 - 03/06/2024 ]

City: Kamra | Country: Pakistan

#### Internship - Pakistan Aeronautical Complex (PAC), Kamra

*Mirage Rebuild Factory (MRF)* (1 Month)

- Gained hands-on experience in various sections of MRF.
- Studied jet engines including ATAR, F-100, TFE-731, T-56, and JF-17 engines.
- Acquired knowledge of engine design parameters and operational principles.

#### **Career-Prep Fellowship**

**Amal Academy** [ 04/07/2024 - 09/10/2024 ]

City: Lahore | Country: Pakistan

Completed a **3-month Amal Fellowship**, where I developed essential skills like communication, teamwork, and adaptability. As part of the fellowship, I worked on a project to design **Sustainable Crochet Toys**, creating ecofriendly toys with safe materials. This hands-on experience helped me grow both professionally and personally, preparing me for future opportunities.

#### **PROJECTS**

[ 08/09/2024 – Current ]

## **Final Year Project**

#### **Computer Vision-Based Robotic Spindle**

Designed a robotic spindle system to detect and measure the shape and size of nuts using computer vision. The system employs machine learning algorithms to identify and align the nuts accurately on a work table, automating

the detection process and improving precision compared to manual inspection. This project enhances efficiency in industrial applications by reducing errors and time spent on shape and size verification.

[ 07/09/2023 - 15/12/2023 ]

# Semester Designed Project

## Solar Water Heater System

Designed an efficient solar water heater system to harness renewable energy for domestic hot water needs. Focused on optimizing performance and sustainability by applying principles of thermodynamics and heat and mass transfer. The project aimed to improve energy efficiency, reducing dependency on non-renewable resources while ensuring a practical and eco-friendly solution for everyday use.

Link: <a href="https://shorturl.at/SNiWv">https://shorturl.at/SNiWv</a>

#### **CERTIFICATIONS AND TRAINING**

[01/05/2024 - 30/11/2024]

#### Machine Learning, AI, and Data Science

Completed a *6-month course in Machine Learning, AI, and Data Science*. Gained hands-on experience in Data Exploration, Neural Networks, Deep Learning, Model Evaluation, and Python programming. Worked on projects using TensorFlow, Scikit-Learn, and Pandas, focusing on image recognition, classification, and regression analysis.

Developed a **Final Project** that classifies human age by training a model on data and testing its accuracy.

Link: <a href="https://shorturl.at/x6oUs">https://shorturl.at/x6oUs</a>

[ 02/11/2022 - 30/01/2023 ]

#### **Autodesk AutoCAD Certified**

Completed a 3-month course in AutoCAD, gaining practical skills in creating 2D and 3D drawings, drafting, and design. Learned to use various AutoCAD tools to produce accurate technical drawings. As a final project, designed a complex piston model, applying the principles learned throughout the course.

Link: <a href="https://shorturl.at/gNMF8">https://shorturl.at/gNMF8</a>

#### **HONOURS AND AWARDS**

[ 04/08/2023 ] ASME(American Society of Mechanical Engineering)

#### **Documentation Head**

As the *Documentation Head at ASME* in the University of Engineering and Technology, I ensure smooth communication. My main tasks include managing and overseeing documentation processes. I maintain accurate records of reports, specs, and meeting minutes. I'm passionate about contributing to engineering growth and facilitating effective communication.

Link: <a href="https://shorturl.at/odWmT">https://shorturl.at/odWmT</a>

JZT Society (Jihaad for Zero Thalassemia)

#### **Student Volunteer**

At JZT, I raise awareness about thalassemia through campaigns and workshops. I aim to educate people about prevention, treatment, and the importance of early diagnosis. My passion for this cause drives me to make a positive impact on affected families.

Link: <a href="https://shorturl.at/qQZl1">https://shorturl.at/qQZl1</a>

#### **DIGITAL SKILLS**

Solid Edge, Solid Works, AutoCad / COMSOL - Intermediate / programming: Python, MATLAB and SQL / Microsoft Office package: Microsoft Word, Excel, PowerPoint, Access / Machine Learning

## **Soft Skills**

Demonstrated leadership skills and a team player. / Problem Solving (Problem Analisys) / Good Communication / Tim e Management:

## **LANGUAGE SKILLS**

Mother tongue(s): Urdu

Other language(s):

## **English**

LISTENING C1 READING C2 WRITING C1

**SPOKEN PRODUCTION C1 SPOKEN INTERACTION B2** 

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

#### **HOBBIES AND INTERESTS**

#### **Creative Writing**

I enjoy writing blogs on various topics, including fashion and daily life. I create engaging content for clients, focusing on trends, personal experiences, and unique perspectives to connect with readers.

## **Playing Football**

I have a strong passion for football, which helps me stay active and improve my teamwork and strategic thinking skills.