HADI AHMED PIRZADA

• Mechanical Engineering Student - 8th Semester •

PROFESSIONAL SUMMARY

A Mechanical Engineering student with a drive to improve technical and non-technical skills, and a penchant for creativity. Interested in 3D-Modelling Design and Analysis, Robotics, and Project Management.

EXPERIENCE

2022 Intern at Fauji Fertilizer Bin Qasim Ltd.

- Interned at FFBL for 5 weeks.
- Participated in equipment overhauling and observed plant shutdowns/TAs.
- Plant overview and Plant Site visits.

2022 Non-Technical Team Lead - Project Sar'at

- Co-founded a Formula Student team named "Project Sar'at".
- Non-Technical Team Lead handling both media and marketing of Project Sar'at.

2021 Director at NUST Automotive Group (NUSTAG)

- Worked on the hands-on assembly of the car designed for the Shell EcoMarathon.
- Tasked with designing a new and innovative body for the car to decrease total drag force.

TECHNICAL SKILLS

DS Solid Works	ANSYS	
PTC Creo	MatLab	
AutoCAD	C++	

NON-TECHNICAL SKILLS

Organizational Skills	Team Player
Communication	Management
Media and Marketing	Flexibility

EDUCATION

2019 - onwards • CEME, NUST Mechanical Engineering - CGPA: 3.82

2017 - 2019 • Bahria College, Islamabad HSSC I&II - 88%

2017 - 2019 • Fazaia Education System School SSC I&II - 94%

PROJECTS

• Design and Fabrication of a 4 DoF Collaborative SCARA Robot for Automation

Design, fabrication, and path-planning of a SCARA robot for the purposes of medical lab automation.

• Paper on Lower Limb Exoskeleton Analysis Combined loading analysis of stress and fracture

Combined loading analysis of stress and fracture mechanics of a lower limb exoskeleton.

Fluid Simulation over an Aerodynamic Car Model

Used ANSYS, FLUENT to simulate air flow over a car model and determine the drag coefficient and pressure and velocity contours and graphs.

• CAD Modelling of a Lathe Machine Used PTC Creo to design a simple lathe machine.

• Employee Management System (C++)

Used C++ to make an Employee Management System. Incorporated functions, arrays, strings, pointers and file manipulation.

Solar (PV) Panel Analysis and Design Optimization Over a Wholesale Commercial Supermarket

Used HelioScope to perform a solar panel analysis over Metro Cash and Carry, new proposed design increased energy production by 20%.

• High Cycle Fatigue Analysis on Wind Turbine in Extreme Wave Conditions in the Arabian Sea

IANGUAGES

LANGUAGES	
Urdu	
English	
Common A1	
German, A1	