



MUHAMMAD AHSAN YOUSAF

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## SKILLS

SOLIDWORKS CAD (Computer-Aided Design) software | CAM (Computer-Aided Manufacturing) | Finite Element Analysis (FEA) | C++ | Arduino Based Projects | Project Management

## EDUCATION

- ❖ BS Mechanical Engineering | University of Engineering and Technology Peshawar | CGPA: 3.03 (Nov '20 – Present)
- ❖ XII (F.Sc in Pre-Engineering) | Government Degree College, Mingora | 944/1100 (2017-2019)

## ACADEMIC PROJECTS

- ❖ **Final Year Project: Design of Indigenous Chairlift for River Crossing**  
In this project, an extensive assessment of existing chairlifts installed across various rivers in Pakistan has been conducted. Based on findings, the critical components of the chairlift, including the cabin structure, rope selection, pulleys, shafts, and weldments has been designed. Additionally, MATLAB application has been developed that allows users to input design parameters and receive the required dimensions and materials for construction. This project aimed to enhance the safety, reliability, and efficiency of chairlifts used in river crossings.
- ❖ **RADAR USING ARDUINO UNO AND PROCESSING 4 | MECHATRONICS**  
This project represents a significant innovation in utilizing microwaves to discern the range, altitude, direction, and speed of objects within its operational sphere. Within the framework of advancing my expertise in embedded systems and signal processing, I conceived and executed a radar object detection system employing Arduino Uno and Processing 4.
- ❖ **HOME AUTOMATION SYSTEM USING BLUETOOTH MODULE | MECHATRONICS**  
The project's abstract underscores the contemporary trend towards maximizing human comfort through the integration of modern appliances and remote-controlled functionalities.
- ❖ **DISTANCE MEASURING DEVICE | C++**  
This project has multiple applications. It enables users to measure distances by merely pointing it at an object and displays it on LCD, eliminating the need for physical interaction, and provides real-time feedback with an alerting beep sound if the distance falls below a predetermined threshold.
- ❖ **2D DRAWINGS | AUTOCAD**  
As part of my endeavors in the course lab, I undertook a captivating project focused on creating a comprehensive visual representation of variety of models using AutoCAD.

## EXPERIENCE

- ❖ **Internship Experience: HVAC Plant, Khyber Teaching Hospital Peshawar** **Duration: 2 weeks**  
I actively contributed to the maintenance of critical HVAC systems. My responsibilities included assisting in routine maintenance, troubleshooting issues, and conducting comprehensive equipment inspections.
- ❖ **Internship Experience: Pakistan Locomotive Factory, Risalpur** **Duration: 2 weeks**  
This experience equipped me with essential skills in mechanical maintenance and repair, familiarized me with locomotive components, and enhanced my problem-solving and analytical abilities, preparing me for a dynamic career in the industry.

## POSITION OF RESPONSIBILITY

- ❖ **HEALTH & WELLNESS CORDINATOR | LHWS | UET PESHAWAR** *(2023- Present)*  
As the Health and Wellness Coordinator, I played a pivotal role in promoting and supporting the physical and mental well-being of members within our society.
- ❖ **FINANCE SECRETARY | BLOOD CHAIN PAKISTAN | UET PESHAWAR** *(2022- 2023)*  
As the Finance Secretary of Blood Chain Pakistan, I held a pivotal role in managing the financial affairs of the organization, ensuring fiscal responsibility and transparency in our operations
- ❖ **CO-CHAIR SECURITY & PROTOCOLS | ASME | UET PESHAWAR** *(2023- Present)*  
I held the primary responsibility for maintaining proper adherence to established security measures and protocols within our society.
- ❖ **AMBASSADOR | LHWS | UET PESHAWAR** *(2021- 2022)*  
Worked as an ambassador for social welfare organization, where I managed and organized multiple events aimed at helping others. From donation drives to iftar events, everything was executed here. Additionally, I organized seminars in personality development and career counseling.