

# Muhammad Umar Abdullah

## Mechanical Engineer

Detailed oriented mechanical engineer, with a passion of pursuing career in mechanical design and analysis systems. Eager to apply theoretical knowledge and practical skills to contribute to innovative projects and solve real-world engineering challenges.

@ m.umaerabdullah@gmail.com +92-318-0796572 Gujranwala, Pakistan in Muhammad Umar Abdullah Portfolio

## EDUCATION

University of Engineering & Technology, Lahore  
2020-Present CGPA: 3.483

### FSc. Pre-Engineering

Govt. College, Ali Pur Chatha, Gujranwala  
2018-2020 91.8%

## PROJECTS

### Comparative Study of Performance Parameters of Conventional and Toroidal Propellers Fabricated using Fused Deposition Modelling

Final Year Project  
2023-Present

### Design and Analysis of a Trailer for Transporting Excavator from a Restricted Space.

Internship Project  
2023

### Revolutionizing Head Protection: MIPS technology Integration in Cycling Helmets

Semester Project - II  
2022-2023

### Modelling of a 300cc 2-stroke Dirt Bike Engine Incorporated with Power Valve to Enhance Performance Parameters.

CAD Modelling Project  
2022-2023

### Enhancing Maneuverability: Pneumatic Approach to Steering Assistance in Heavy Duty Automobiles

Semester Project - I  
2022-2023

## SOFTWARE

### SOLIDWORKS & AutoCAD

CAD 3D Modelling and Mechanical Drafting

### Ansys & MATLAB

Structural and Thermal Analysis

### Siemens Simcenter Star-CCM+

Computational Fluid Dynamics and Heat Transfer

### Python & MATLAB

Scripting & Data Vizualization

### Luxion Keyshot

Renderings and CAD Model Presentations

## WORK EXPERIENCE

### Summer Internship

Descon Engineering Limited, Lahore.

Infrastructure Projects Division Jul 2023 - Aug 2023

As an Intern at Descon Engineering Limited, I devised a solution for transporting a mini crawler excavator through a small tunnel at MDHP. I also gained valuable experience in reading P&IDs and contributed to pumping calculations for the K-IV project's motor.

### Summer Internship

Heavy Mechanical Complex, Taxila.

Workshop, Casting & Forging Jun 2022 - Jul 2022

During my internship at HMC, I assimilated reading mechanical drawings, engaged in diverse fabrication shop and learned working of various mechanical process equipments. I learned Non-destructive testing methods, casting & forging basics, and operated pneumatic and hydraulic presses.

## CERTIFICATES

### Applied Computational Fluid Dynamics

Siemens Dec 2023

### Environment, Society & Governance

Corporate Finance Institute (CFI) Nov 2023

### Health & Safety, Training Session

OSALP International Jul 2023

### Engineering Drawings: Reading Drawings & Specs

Project Management Institute (PMI) Jul 2022

### AutoCAD Mechanical Essentials Course

LinkedIn Learning Jul 2022

### Excel Essentials Training Course

NASBA (LinkedIn Learning) May 2022

### MATLAB Essentials Course

LinkedIn Learning May 2022

## SKILLS

Computer Aided Design

Data Visualization

Computational Fluid Dynamics

Mechanical Design

Mathematical Modelling & Simulation

Graphics

Finite Element Analysis

Scripting and Automation

Problem Solving

Sketching