

Muhammad Usman Khan *Student*



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Jhangi Syedan (F.A), Islamabad

🌐 Usman Khan

📞 03409720931

🔗 Portfolio Website

Skills

AutoCAD 3D Modelling



Solidworks 3D Modelling, Animations
and Rendering



Fluid Mechanics



Thermodynamics



Engineering Mechanics



Web Development: portfolio, Blog & e-commerce websites



Hands-on experience developing AI agents with Gemini and Groq APIs



Hands-On: Claude Code



Projects

Energy Analysis of an Electric Kettle (Thermodynamics-I Project) 🔗

Energy and Entropy Analysis of Rolls-Royce Trent 1000 Engine 🔗

Ionic Thruster / Ion Wind 🔗

Hydraulic Robotic Arm Made with Cardboard and Syringes 🔗

V6 Engine (Solidworks 3D Model) 🔗

Drone (AutoCAD 3D Model) 🔗

Load Analysis and Beam Design for a Pedestrian and Light Vehicle Bridge 🔗

Electric Motor Selection: A Comparative Analysis of AC and DC Motor Technologies 🔗

Interests

Aerospace Systems & Control Engineering 🔗

Passionate about aerospace systems and control engineering, with a proposed final-year project focused on developing a small-scale ballistic missile system. The planned work includes airframe design, CFD analysis in ANSYS, 6-DOF trajectory simulation in MATLAB, and implementation of PID-based flight control algorithms. This project aims to integrate mechanical design, simulation, and embedded control systems to explore complex aerospace engineering challenges.

Education

Matriculation, KRL Grammar School

2020 – 2022 | Pakistan

FSc Pre-Engineering, IMCB G-10/4

2022 – 2024 | Pakistan

BE Mechanical Engineering, Air University Islamabad 🔗

2024 – 2028 | Pakistan

Certificates

AutoCAD (digiskills) 🔗 — Completed an AutoCAD course online at digiskills.pk

Solidworks (udemy) 🔗 — Completed a Solidworks course online at udemy, along with additional online classes.

Courses

AutoCAD *🔗 , Digiskills*

Solidworks *🔗 , Udemy*

Python Programming *🔗 , PIAIC / Panaversity*

Full Stack Development *🔗 , Udemy*

Languages

- English

- Urdu

- Pashto

Hobbies

Football, *In My Free time, I enjoy to Play Football*

Running, *Good for health, and best for fitness*

Coding, *I develop website and create agents, its my one of the best hobby*