

# ZAIN ULLAH KHAN

E-Mail: zainullahkhan28@gmail.com  
Cell no: +92307-5676019  
PTCL no: 051-9330399  
Date of Birth: 24-12-1996  
Nationality: PAKISTANI  
Gender: Male  
Address: House#83-D, Street#3, G-7/3-2, ISLAMABAD.



## Objective:

Seeking an opportunity to secure a challenging and competitive position as a Mechanical Engineer in a reputed organization that enables me to share and enrich my knowledge in all possible dimensions.

## ACADAMIC PROFILE:

COURSE	INSTITUTION	BOARD/UNIVERSITY	YEAR OF COMPLETION	PERCENAGE/ CGPA
B.E Mechanical Engineering	Air University, Islamabad, Pakistan.	Air University, Islamabad, Pakistan.	2014-2018	3.66/4
HSSC	Punjab College, Islamabad	Federal Board	2012-2014	76.36%
Matriculation	Islamabad Model School for Boys G-7/4, Islamabad	Federal Board	2010-2012	84.95%

## Software Skills:

- ❖ SolidWorks, ADAMS, ANSYS, AutoCAD, Engineering Equation Solver(EES), MATLAB, Microsoft Office.
- ❖ Excellent command in C++, and G-code Programming.
- ❖ **Language:** English(Fluent), Urdu (National).

## Research Projects:

### Final Year Project:

- **Design, Analysis and Fabrication of Self-Starting Vertical Axis Wind Turbine (VAWT)**  
The goal of this project was to fabricate a small-scale wind turbine of 300W power generation specifically for low wind speed sites. The combination of common vertical axis wind turbines (VAWT) rotors was designed, analyzed and fabricated for optimal performance in low wind speeds. The Drag Struts (Savonius rotor) creates high torque and is self-starting even at low wind speeds but is relatively low in efficiency rating. Drag struts was used to start the straight bladed Darrieus rotor. The Darrieus rotor is not a self-starting rotor but has much higher efficiency than the Savonius rotor. The combination of rotors increases the total power of the turbine in lower wind speeds. The blade profile for darrieus rotor is NACA0018 optimized using a German software QBlade. One-way FSI was performed using ANSYS Workbench. Finite element analysis was done using Ansys to locate stress centration zones (SCZs) and deformations.

- Design and Fabrication of Centrifugal pump impeller.
- Design, Analysis and Fabrication of Automated LAPTOP TABLE.
- Design, Analysis and Fabrication of Prosthetic ARM.
- Design and FEM analysis of Epicyclic Gear Train.
  - Structural Analysis
  - Modal Analysis
- Design and CFD Analysis of Racing Car using Solidworks and ANSYS Fluent.
- Explicit Dynamics (Crash Analysis) of car using ANSYS.

## WORK EXPERIENCE:

From July 10, 2016 to August 10, 2016	<b><u>Intern at GREAVES AIRCONDITIONING (PVT.) LTD ISLAMABAD:</u></b> <ul style="list-style-type: none"> <li>• Worked extensively on HVAC systems, management, control and skillfully assisted project design.</li> <li>• Also attended a workshop on advanced tools of Microsoft Excel, designed and conducted by Greaves IT Department.</li> </ul>
From June 6, 2017 to July 5, 2017	<b><u>Intern at Industrial Techonlogy Development (NESCOM) ISLAMABAD:</u></b> <ul style="list-style-type: none"> <li>• Worked broadly on Additive manufacturing, techniques and the functioning of different types of 3D printers.</li> <li>• During that time period developed the report “Manufacturing Cycle of 3D Printing Facility from Design to Final Delivery” under the supervision of project director Dr. Aqeel Ahsan Khurram.</li> </ul>
From July 17, 2017 to July 28, 2017	<b><u>Intern at PAKISTAN AERONAUTICAL COMPLEX KAMRA:</u></b> <ul style="list-style-type: none"> <li>• Member of internship training held at Aircraft Rebuild factory Kamra.</li> <li>• Initially, the factory started overhauling of F-6 aircraft and with an ever-growing sphere of responsibility, the factory undertook the task of overhauling of A - 5III, FT - 5, Y - 12, K - 8 and F - 7 aircraft variants. During internship, the objective is to understand the working of these aircrafts and the equipment used in the factory.</li> </ul>
From August 1, 2017 to September 1, 2017	<b><u>Intern at Pakistan Real Estate Investment and Management Company (Pvt.) ISLAMABAD:</u></b> <ul style="list-style-type: none"> <li>• Worked sincerely on some notable projects of PRIMACO               <ol style="list-style-type: none"> <li>1. Construction of EOBI Serena Hotel and Mixed Used Development Project Lahore</li> <li>2. Construction of Multi-Purpose Cineplex Commercial Complex I-8 Markaz Islamabad.</li> <li>3. Construction of OEC Tower G-9/4, Islamabad.</li> </ol>               Under the guidance of AGM (Engineering) PRIMACO ISLAMABAD.             </li> </ul>

### Personal Achievements:

- Was the captain of school **SCOUTS and GUIDES** team.
- Was the captain of school **Football** team.
- Was the part of College **Football** team.
- Won “**BEST STUDENT OF THE YEAR PRIZE**” in Matric.
- **1<sup>st</sup>** position in Matriculation in School.
- Won “**100% ATTENDANCE AWARD 2012-2014**” in FSC. Pre-Engineering.

### Activities:

- ❖ **Sports:** Football, Table Tennis and Cricket.
- ❖ Book Reading, Gardening, Innovative Technologies Research.

### References:

- ❖ References will be provided on demand.