



Muhammad Arslan Afzal

Passport: KR1517391 **Nationality:** Pakistani **Date of birth:** 13/12/2000

Place of birth: GUJRAT, Pakistan **Gender:** Male

Phone number: (+92) 3434581187 **Email address:** arslhow.12@gmail.com

Home: House No 4 St No 4 Qazi Street New Gulzar e Quaid Rawalpindi, Pakistan, 46000 Rawalpindi (Pakistan)

ABOUT ME

To become aspiring leader in impulse manufacturing industry and research setup, passionate about advancing mechanical engineering through innovation. Committed to continuous learning, problem-solving, and excellence in academia and industry. Seeking opportunities to contribute and grow in a dynamic international environment.

WORK EXPERIENCE

AERODYNAMICS LAB ENGINEER

CAE, Pakistan Air Force [25/03/2023 – Current]

City: Risalpur | **Country:** Pakistan

1. Manage & control smooth testing operations in wind tunnel lab
2. R & D for development of various projects and modifications in PAF fleet
3. Implementation of Safety through OSHA
4. Teaching Aerodynamics courses AERO-331 (Wind Tunnel Testing) ,AERO 214 (Viscous Fluid Flow)
5. Maintenance of Technical Equipment X-Ray Diffraction, wind tunnels, UTM, Torsion ,Creep Machine

TRAINEE ENGINEER

TOYOTA MOTORS [05/08/2022 – 10/03/2023]

City: Islamabad | **Country:** Pakistan

1. Carry out periodic inspections and maintenance
2. Quality Control and Continuous Improvement
3. Mechanical Troubleshooting engine, transmission, and braking systems
4. Utilize CAD software for creating or modifying mechanical designs.

INTERNEE

ROAD MASTER [05/06/2022 – 25/07/2022]

City: Islamabad | **Country:** Pakistan

1. Routine maintenance learning how to change engine oil, inspect and replace filters, and lubricate moving parts.
2. Diagnostic of flaws including brake system issues, engine problems, and suspension defects with detailed follow-up
3. Organizational Level Maintenance and Inspections of Engine
4. Fleet Scheduling & dispatching

INTERNEE

HEAVY INDUSTRY TAXILA [06/09/2021 – 10/11/2021]

City: Taxila | **Country:** Pakistan

- Two-month internee experience at hit where I designed and fabricate the industrial fork lifter for Warehouses. During training phase, I get Well hands on experience In engine inspection and repairing section.

EDUCATION AND TRAINING

BACHELOR OF MECHANICAL ENGINEERING

National University of Technology Islamabad Pakistan [30/08/2018 – 25/08/2022]

Address: National University of Technology Islamabad , Pakistan, Islamabad (Pakistan) | Website: <https://nutech.edu.pk/> | Final grade: 2.8 / 4.0 | Number of credits: 134

Registered Engineer with Pakistan Engineering Council (PEC)
Registration No : MECH / 52574

HIGHER SECONDARY SCHOOL CERTIFICATE

Fauji Foundation College for boys New Lalazar Rawalpindi [01/06/2016 – 01/06/2018]

Address: New Lalazar Rawalpindi, Pakistan, Rawalpindi (Pakistan) | Website: <https://education.fauji.org.pk/> |
Field(s) of study: Pre Engineering | Final grade: 887/1100 A+

- Pre Engineering (Physics, Chemistry, Mathematics)

SECONDARY SCHOOL CERTIFICATE

FG School Chaklala Garrison [01/06/2014 – 31/05/2016]

City: Rawalpindi | Country: Pakistan | Website: <https://www.fgei.gov.pk/> | Field(s) of study: Computer Science
| Final grade: 907/1050 A+

- Mathematics, Physics, Computer

LANGUAGE SKILLS

Mother tongue(s): Urdu | Panjabi; Punjabi

Other language(s):

English

LISTENING C2 READING C2 WRITING C2

SPOKEN PRODUCTION C2 SPOKEN INTERACTION C2

Punjabi

LISTENING C2 READING C1 WRITING C1

SPOKEN PRODUCTION B2 SPOKEN INTERACTION C1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

DIGITAL SKILLS

Microsoft Office / Microsoft Excel / Power Point / Organizational and planning skills / Team-work oriented / Solid Works / Ansys FLUENT / Matlab / Auto CAD / Project Management

COMMUNICATION AND INTERPERSONAL SKILLS

COMMUNICATION SKILLS

1- Excellent formal and informal verbal and written communication skills gained at university and especially through my experience as Engineering Maintenance Officer.

2- Outstanding Interpersonal skills developed during formative years of education and honed during professional assignments especially during Lab Engineer at PAFA

MANAGEMENT AND LEADERSHIP SKILLS

MANAGERIAL AND TEAM LEADING SKILLS

1- Managerial skills (been responsible for technical diagnostic maintenance of equipment)

2- Team-leading skills by motivating under command employees at lab research complex to work consistently in field in difficult weather conditions and immense work pressure by leading from the front and by example. Also gained experience as campus ambassador of GYM EX'18 competition and as tree-plantation volunteer head.

HONOURS AND AWARDS

Honours and awards

- Certificate of Excellence Performance In Department CAE NUST
- Excellence certificate for installation of solar charging station in CAE
- Chapter Leader @stateofyouthnutech
- ASME chapter leader
- Excellence award in Intermediate from FFHO
- CEME NUST Best Declamation
- AYIMUN Planning member at crossadder Islamabad
- Member of University event Management Society
- Campus Ambassador NYFP From state bank Pakistan
- Vice-Captain at Green Youth Movement club
- NUTECH Socio Work
- Members at Donors Donate blood Save lives

[10/11/2017] FBISE ISLAMABAD

HIGHER SECONDARY SCHOOL CERTIFICATE

Secured Distinction Grades in Fauji Foundation College in Higher Secondary School (83 %)

[01/08/2016] FBISE ISLAMABAD

SECONDARY SCHOOL CERTIFICATE (MATRICULATION)

Secured Distinction Grades in FG Public School Rawalpindi in Secondary School (Matric) - 87 %

[31/10/2021] National University of Sciences and Technology

RECTOR'S NUTECH HIGH ACHIEVERS AWARD

Awarded for excellent performance in co-curricular activities (Participation in AIAA Air Ex Challenge 2019, ASME 2020 TECH AUTEC)

[09/10/2024] Pakistan Air Force

NOMINATED FOR COMMANDANT APPRECIATION CERTIFICATE

Nominated for Commandant CAE appreciation certificate on installation of solar charging station at PAFA

CERTIFICATIONS / PROFESSIONAL COURSES

[06/08/2019 – Current]

CERTIFICATIONS / PROFESSIONAL COURSES

I have been awarded various certifications and professional course as mentioned below:

1. Project management course Google.
2. Teaching & Professional Coaching Course JCCL PAFA
3. Leadership & Management Course JCCL
4. English Proficiency Level 6 Berlitz International
5. CAD,CAM and practical CNC machining from AUTODESK
6. Vice-Captain of Green youth Movement Club Nutech
7. Chapter leadership and management training from university of Netherlands
8. Fire Safety team leader (Shaukat Ali Udemy)
9. Graphic Design & freelancing from Digi skills
10. Creative writing From virtual university
11. Psychology from university of Toronto
12. Public speaking university of Washington
13. English language course (Georgia institute of technology)
14. Positive Psychiatry and Mental Health (university of Sydney)
15. IELTS with 6.5 bands in modules.

HOBBIES AND INTERESTS

Hobbies

- 1- Cricket (I was Vice Captain of Cricket team and led them to Runner Up Trophy in Year 2016 grabbing a bronze medal to my credit)
- 2- I was an active member of College Dramatic Club and have many dramatic events and programs to my credit.
- 3- I also took active part in Community Service in Graduating year 2021 despite mounting pressures of Final Year Project.
- 4- Participation in AIAA GIKI Chapter Air Ex 2020 Innovation Challenge leading my team in various competitions including Compressed energy storage systems, Ballistic Propelled Rocket Design.

PROJECTS

[15/05/2020 – 10/07/2022]

Heat Storage System Using Phase Change Material for Waste Heat Recovery

To design thermal energy storage unit using shell and tube heat exchanger and PCM Waste heat recovery and environment protection in cement industry, refinery and power houses. Comparing the results of numerical modeling in CFD Ansys fluent and experimental model.

[10/03/2022 – 10/06/2022]

CleanTeach Innovation Challenge 2022

To design "COMPRESSED AIR ENERGY STORAGE SYSTEM" which increase the energy saving enhance air quality and emission can reduced near to zero with high reliability and low capital investment.

[09/09/2021 – 20/11/2022]

Fabrication of Industrial Forklift

Design and fabricate of two Wheel Forklift for Industry Warehouses.

[10/05/2024 – 05/01/2025]

Design Development and Wind Tunnel Testing of High Speed Target Drone(HSTD)

The project involves the design and development of a high-speed target drone optimized for testing a focuses on creating a drone capable of simulating complex flight scenarios at high speeds, providing valuable data for missile guidance and defense system evaluation. Wind tunnel testing is used to analyze and improve the drone's aerodynamic performance, ensuring stability and precision in high-speed environments. This approach enhances the drone's reliability and effectiveness in real-world military and aerospace operations.

RECOMMENDATIONS

Name: Dr. Muhammad Taimoor | Assistant Professor

Academic Referee (Assistant Professor, Deptt of Avionics Engineering, NUST)

Email: muhtaimoor123@hotmail.com | Phone number: (+92) 3150846456

Name: Dr.Yasir Ali | Assistant Professor

Academic Referee (Assistant Professor, Aerospace Engineering Department, NUST)

Email: yasir@dgu.ac.kr | Phone number: (+92) 3369712933

Name: Dr Imran Shah | Assistant Professor

Academic Referee (Assistant Professor, Mechanical Engineering Department, Air University)

Email: imran.shah@au.edu.pk | Phone number: (+92) 3429216419