Malik Safi Ullah

Date of birth: 12 Jul 1997 | **Nationality:** Pakistani | **Phone number:** (+92) 3167907969 (Mobile) | **Email address:**

safiwaseem61@gmail.com | **Address:** Islamabad, Pakistan (H-13)

ABOUT ME

Mechanical Engineer with master's in Computational Science and Engineering, specialization in applied mechanics. Looking for a career-oriented role to utilize my skills.

EDUCATION AND TRAINING

5 OCT 2020 – 20 JUL 2023 Islamabad , Pakistan
MS COMPUTATIONAL SCIENCE & ENGINEERING National University of Sciences & Technology, Islamabad

Finite Element Analysis, Computational Fluid Dynamics, Explicit Dynamics, Boundary Layer Theory, Data Statistics & Analysis, Applied Mathematics

Address H-12, 44000, Islamabad , Pakistan | **Website** https://nust.edu.pk/ |

Field of study Inter-disciplinary programmes and qualifications involving engineering, manufacturing and construction

Final grade 3.40 |

Thesis Effect of street orientations and aspect ratio on the urban microclimate: A case Study of twin cities (i.e. Islamabad and Rawalpindi) of Pakistan

5 SEP 2016 – 31 AUG 2020 Lahore, Pakistan
BSC MECHANICAL ENGINEERING University of Engineering & Technology, Lahore

Machine Design & CAD, Mechanics of Materials, Fluid Mechanics, Thermodynamics, Power Plants, Internal Combustion Engines, Production and Operations Management, Refrigeration & Air Conditiong, Instrumentation & Control

Address 54890, Lahore, Pakistan | **Website** https://www.uet.edu.pk/ |

Field of study Engineering, manufacturing and construction | **Final grade** 3.82 |

Thesis Preliminary design of solar tower power plant & outlook of cad models in virtual reality.

WORK EXPERIENCE

1 MAY 2021 – 30 JUL 2023 Islamabad, Pakistan
RESEARCH ASSISTANT NATIONAL UNIVERSITY OF SCIENCES & TECHNOLOGY, ISLAMABAD

The research was to conduct a thorough CFD analysis of different blocks of Rawalpindi and Islamabad cities to find the best orientation and height-to-width ratio to minimize the air temperature and increase outdoor thermal comfort. Further, the research findings were presented to the Pakistan Institute of Development Economics to consider future development plans.
https://pide.org.pk/rasta/wp-content/uploads/Salma-Sherbaz-Conference-Policy-Brief.pdf

Department School of Interdisciplinary Engineering & Science | **Address** H-12, 44000, Islamabad, Pakistan |

Website https://sines.nust.edu.pk/

16 SEP 2020 – 15 OCT 2020 Gujranwala, Pakistan
INTERN WAPDA

My project was to learn the effects of cracks and flaws due to vibrations in a turbine and how we can remove them. My task also includes the study of pumps and mechanical seals. During my project, the

turbine blade was due for maintenance due to the cavitation process, and turbine blades were repaired using welding and repeatedly grinding to balance the weight of the blades.

Business or Sector Electricity, gas, steam and air conditioning supply ⏐ **Address** 52250, Gujranwala, Pakistan ⏐

Website http://www.wapda.gov.pk/index.php/projects/hydro-power/o-m/nandipur

18 JUN 2018 – 17 JUL 2018 Taxila, Pakistan
INTERN HEAVY MECHANICAL COMPLEX

Developed understanding of different operations in departments like Production Planning & Control, Fabrication, Machining, Quality Control, NDT Laboratory, Heat Treatment, Forging Unit, Steel Foundry & Assembly department. Forging of immense objects to improve their stress-strain relation.

Business or Sector Manufacturing ⏐ **Website** https://www.hmc.com.pk/

DIGITAL SKILLS

UNITY 3D ⏐ Microsoft Office ⏐ SolidWorks ⏐ AutoCAD ⏐ ArcGIS by ESRI ⏐ Simulink ⏐ ENVI-met ⏐ CFD(Fluent and OpenFOAM) ⏐ LaTeX ⏐ Linux ⏐ FEM (Abaqus standard/ Explicit) ⏐ ANSYS Explicit Dynamics (Good) ⏐ ANSYS - Static Structural ⏐ Python ⏐ C++ ⏐ MATLAB

LANGUAGE SKILLS

Mother tongue(s): **URDU**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C2	C2	C2	C2	C2

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

ADDITIONAL INFORMATION

PUBLICATIONS

THE USE OF VIRTUAL REALITY TECHNOLOGIES IN AUTOMOTIVE DESIGN – 2019
Preliminary design of automotive designs & outlook of cad models in virtual reality. The application of CAD software in design and development is increasing with every passing day. Visualizing the designed data in software plays a vital role during design.

Visualization of Heliostat Field of Solar Thermal Tower Power Plant Using Virtual Reality (VR) Technologies
– 2022
An important limitation during the design phase is the visualization of three-dimensional geometry. VR technologies can help with visualization, as well as in the development of the field of solar thermal power plants, having minimal design-related issues.