

MUHAMMAD BILAL

+92-340-2392598 | muhammadbilalashraf11@gmail.com | www.linkedin.com/in/muhammadbilal1998

Scopus Author ID: 57224853340

ORCID ID: 0009-0003-1240-6884

EDUCATION

PhD in Mechanical Engineering – In Progress

NED University of Engineering & Technology (CGPA: 3.70)

(Major Courses: Numerical Methods in Heat Transfer, Advanced Computational Fluid Dynamics, Fluid Flow in Micro & Macro Channels, Statistical Mechanics & Molecular Simulation, Research Methodology, Advanced Finite Element Analysis)

Thesis Title: Hybrid Atomistic-Continuum Modelling of Compressible Gas Flows in Sub-Microscale Channels with Varying Geometric Features

Karachi, Pakistan

2024 – till date

Masters of Engineering (Energy Systems)

NED University of Engineering & Technology (CGPA: 3.35)

(Major Courses: Advanced Statistics, Energy Management, Industrial Automation, Advanced Heat Transfer)

Thesis Title: Experimental & Numerical Investigation on delamination of Carbon fiber reinforced polymer)

Karachi, Pakistan

2022 – 2024

Bachelors of Engineering (Mechanical)

NED University of Engineering & Technology (CGPA: 3.793)

(Major Courses: Plant Maintenance, Operation Management, Engineering Mechanics, Heat Transfer, Machine Design)

Project Title: Designing & Fabrication of Small Scale Hydrogen Production Plant using Renewable Energy Method)

Karachi, Pakistan

2017 – 2021

PROFESSIONAL EXPERIENCE

Project Manager, Erasmus+ Capacity Building Project

NED University of Engineering & Technology

- Complied timelines to complete deliverables on time.
- Drafted the reports of all deliverables.
- Organized all events under the project, manage & communicate information to stakeholders.
- Planned and execute deliverables in all consortium institute.
- Developed and maintain the website of project.
- Assisted the Principal Investigator as a teaching assistant.

Karachi, Pakistan

Oct 2023 – Till date

Research Officer

Pakistan Navy Engineering College, NUST

- Prepared feasibility, proposed budget and schedules of new projects.
- Proposed SOPs for H&SE & machine operations.
- Hands-on Experience on CNC 3-axes & 4-axes machines.

Karachi, Pakistan

July 2022 – Sept 2023

Project Co-ordinator

GlaxoSmithKline

- Assisted in supervising the project of placement of Data loggers.
- Prepared and rectified the CSV documents for TP13 audit.
- Assisted in supervising the placement of energy analyzer at main LV & sub LV room
- Maintained the performance of KPI related to CMMS by timely closure of Work orders

Karachi, Pakistan

May 2022 – June 2022

ACADEMIC PUBLICATION

- Bilal, M., Jamil, T., Wasif, M. et al. Impact of fiber orientation and stacking sequence on the severity of drilling induced delamination in carbon fiber reinforced polymer (CFRP) laminates. Int J Interact Des Manuf 19, 6537–6545 (2025). *Jan 2025*
<https://doi.org/10.1007/s12008-025-02234-5>

PROFESSIONAL TRAININGS

- Attended the Summer school on “Metal Additive Manufacturing” held in University of Brescia, Italy *August 2024*
- Attended the Summer school on “AI and High Performance Computing” held in Mianwali, Pakistan. *August 2025*

EXTRACURRICULAR PARTICIPATION

- 13th International Mechanical Engineering Conference (IMEC-24), NEDUET Karachi *March 2024*
- Global Conference on Green Construction Material and Practices (GCGC-25), NEDUET Karachi *February 2024*
- 14th International Mechanical Engineering Conference (IMEC-25), NEDUET Karachi *April 2025*

PROFESSIONAL AFFILIATION

- PAKISTAN ENGINEERING COUNCIL (Mech/50610)