

KHALID ZIA KHAN

<https://www.linkedin.com/in/khalid-zia-khan-291196249/>

khalidziakn7189@gmail.com

(+92) 3078647270



EDUCATION

National University of Sciences and Technology (NUST)

Rawalpindi, Pakistan

Bachelor of Science in Mechanical Engineering, 3.11/4

2020 - 2024

PROFESSIONAL EXPERIENCE

- Bestway Cement Limited – Graduate Trainee Engineer** JUN'24 to DEC,24
Managed project converting electrostatic precipitators to baghouse systems, overseeing scheduling and resource allocation using SAP. Assisted in troubleshooting and maintenance activities, to enhance operational efficiency and minimize downtime. Participated in safety seminars to promote a safe working environment.
- Kohinoor Textile Mill Limited Rawalpindi, Pakistan - Mechanical Engineering Intern** AUG'22 to SEP'22
Gained hands-on experience with Wartsila, Niigata, and Jenbacher engines in the mechanical engineering and power industries at a leading Pakistani textile company specializing in production and trading.
- National Center of Robotics and Automation, Pakistan - Mechanical Engineering Intern** AUG'23 to SEP'23
Fabricated wooden shields using laser cutting, operated CNC Milling Machine (FANUC Oi-MF), and designed a line following robot at the Robot Maker Lab, gaining extensive practical skills in robotics and SolidWorks analysis.
- Millennium Fellowship – Millennium Fellow for the Class of 2023** SEP'23 to DEC'23
Exciting collaboration with the United Nations Academic Impact and Millennium Campus Network. This project involves providing education to orphanages, aiming to empower and uplift the lives of underprivileged children.

ACADEMIC EXPERIENCE

FYP TITLE – ANSYS, SolidWorks, Primavera, Excel, PlotDigitizer, MATLAB

Impact Resistance and Damage Tolerance Improvement of Fiber-Reinforced Composites through Hybridization Technique AUG 2023 – MAY 2024

- Performed literature reviews and experimental testing to evaluate hybridization effectiveness.
- Manufactured and analyzed carbon-basalt hybrid composites (pure and 50% hybrid) for low-velocity impact (LVI) at 75J, 90J, and 115J.
- Conducted 3D scanning on post-impact samples to assess damage and optimized mechanical properties, improving strength and energy absorption by 15%.

Complex Engineering Problems(CEP) – ANSYS, SolidWorks, Primavera, Arduino

- DESIGN OF OIL WELL (4-BAR MECHANISM)
- Line Follower Bluetooth Controlled Robot using Arduino.
- Modal Vibration Testing and Analysis of Two-Story Building.

RESEARCH PAPER

- Design, Modeling and Cost Analysis of 8.79 MW Solar Photovoltaic Power Plant at National University of Sciences and Technology (NUST), Islamabad, Pakistan**
<https://doi.org/10.1038/s41598-024-74187-w>

Shabahat Hasnain Qamar*, Dawid Piotr Hanak, Majid Ali, Joao Gomes* & Khalid Zia Khan

- Solar Photovoltaic Thermal (PVT) System Integration for Sustainable Energy Production in a Dairy Farm in Belgium | Principle in acceptance (Heliyon-2405-8440)**

Shabahat Hasnain Qamar*, Khalid Zia Khan, and Dr. Joao Gomes*

EXTRACURRICULAR & VOLUNTEER EXPERIENCE

NustagOfficial	Director - Goal-oriented technical and non-technical work.
Digital Empowerment Pakistan	Secretary R&D Group - Facilitate communication and maintain documentation.
Positive Pakistan PPF	Ambassador - Promotion and marketing of events organized by PPF.
KAAR-E-KAMAL	Inspires others to make a change in the community and serve humanity.

HONORS AND AWARDS

Zindagi Prize JS BANK Regional (2023), CAD Competition, NUST High Achiever Award and Design and Build a Prototype of a Motion Transmission Mechanism Solving Real World Kinematic Problem using Four-bar Linkage.

SKILLS

Technical Skills	AUTOCAD, ANSYS, SOLIDWORKS, SAP, MS EXCEL, and PRIMAVERA
Soft Skills	Initiative and Drive, Communication, Problem Solving, Teamwork, Leadership

CERTIFICATES

Project Management, Climate Change, Fundamentals of Renewable Technology, Vehicle Dynamics, Effective Leadership and Ansys-Mechanical.