

CAREER SUMMARY

Results-driven Mechanical Engineer with hands-on experience in CAD modeling, technical analysis, simulation, and real-world testing. Possesses a proven track record conducting research in intelligent systems and composite materials, supported by multiple publications. Proficient in MATLAB/Simulink, ANSYS Fluent, SOLIDWORKS, and AI-based integration for dynamic simulations. Experienced in analysing fluid-flow simulations, with a strong focus on improving processes and enhancing product quality.

PROFESSIONAL EXPERIENCE

INTERNEE MECHANICAL ENGINEER | Heavy Mechanical Complex (HMC) | Taxila, Pakistan**June 2024 – Sep 2024**

- Assisted in production planning, quality control, and mechanical operations.
- Worked with teams on feasibility studies, BOQs, and fatigue analysis for industrial components.
- Analyzed performance data and provided recommendations to enhance production reliability.

RESEARCH ANALYST | NUST | Islamabad, Pakistan**Apr 2023 – Sep 2023 | Oct 2024- Jan 2025**

- Co-authored 8 research and review papers across diverse topics, focusing on structured academic writing.
- Specialized in academic editing and formatting using IEEE, APA, and Chicago citation styles.
- Conducted in-depth literature reviews and supported journal/conference paper submissions.
- Assisted in writing summaries, discussions, and data-backed analysis sections of research publications.

TECHNICAL WRITER | Ultimus Int., (Remote) | Königsbrunn, Germany**Dec 2022 – May 2025**

- Created and maintained technical documentation including user guides, product manuals, and software release notes.
- Collaborated with product and engineering teams to gather requirements and translate complex technical concepts into accessible documentation.
- Developed structured content using Confluence and Word; ensured consistency and compliance with documentation standards.
- Contributed to the creation of API documentation for software platforms, including integration workflow.

EDUCATION

BACHELOR'S DEGREE | Mechanical Engineering | **CGPA 3.6** | National University of Sciences and Technology**2021 - 2025****COLLEGE** | Pre- Engineering | **Grade 98%** | FG Sir Syed College**2019 - 2021**

PROJECTS |

- Estimation of Vehicle Parameters for Dynamic Simulations
- AI-Based Smart Cold Storage System
- Nano-Fluid-Based Heat Transfer System
- Smart Pedometer with ESP-32 & MPU-6050
- Moon Rover Tire Design
- Human Powered Vehicle
- Flow Simulation in Heat Exchangers
- Book Store Management System
- HVAC Load Calculations of Building

TECHNICAL SKILLS

SOLIDWORKS | ANSYS (Mechanical, Fluent) | Primavera P6 | MATLAB/Simulink | AI Integration | Microsoft Office 365 | Problem Solving | Research and Development | Decision Making | Critical Thinking | Process Optimization | Confluence | API Documentation |

HONOURS AND AWARDS

- Champion, ASME XRC Autonomous Vehicle Challenge** – American Society of Mechanical Engineers (ASME)
- NUST High Achiever Award (3 times)** – National University of Sciences and Technology (NUST)
- Publication Award for Book Chapter** – National University of Sciences and Technology (NUST)

CERTIFICATIONS

- Certified SOLIDWORKS Associate (CSWA)-Mechanical Design, Simulation, Additive Manufacturing, Sustainability**
- ASME B31.8 GAS Transmission and Distribution Piping Systems**
- ASME Selection of Pumps**
- Project Management Virtual Experience Program** | CBRE Forage |
- Six Sigma: Green Belt** | PMI Certified |
- Crash Course on Python** | Google |