

MUBEEN UR REHMAN

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Gender Male

Email: Mubeen.rehman.nust@gmail.com

Nationality: Pakistani

Country of Residence: Sweden

PROFESSIONAL EXPERIENCE

- Systems Engineer, Skoltech, **Russia** Oct 2022- Jan 2023
- Assistant Manager, Public Sector Organization, **Pakistan** Jul 2017- Nov 2020
- Internship Smart Solutions, **Samara, Russia** Jun 2021- Aug 2021
- Internship at Oil and Gas Development Company Ltd, **Pakistan** 05-31 Aug 2015

EDUCATION

- **Licentiate in Mechanical Engineering** Feb 2023-Jul 2025
Blekinge Institute of Technology (BTH)
Karlskrona, Sweden
- **Masters in Space and Engineering Systems, (MSc)** Sept 2020 – June 2022
Skolkovo Institute of Science and Technology (Skoltech)
Moscow, Russia
- **Bachelor of Mechanical Engineering (B.E.)** 2013-2017
College of EME, National University of Science & Technology (NUST)
(46000) **Rawalpindi, Pakistan**, CGPA 3.43/4
- Leadership and Innovation Course, GPA 4.0/4.0 (3-ECTS) 27 Jul - 11 Aug 2017
Istanbul Aydin University, **Istanbul, Turkey**
- **Russian Language** 27 Jun - 05 Aug 2016
National University of Modern Languages, **Pakistan**
- International Program on Rising Powers in World Politics, 8/10 (2-ECTS) Jul 2015
Higher School of Economics (HSE), **Moscow, Russia**
- **Higher Secondary School Certificate, FBISE, Pakistan** 2011-2013
Percentage: 86.16%, Graduated 2013
- **Secondary School Certificate, FBISE, Pakistan** 2009-2011
Percentage: 92.29%, Graduated 2011

INTERNATIONAL VOLUNTEERSHIPS

- **International Cultural Coordinator Volunteer** 21 Aug – 03 Sept 2017
- **International Conference Coordinator Volunteer** 20 Aug – 02 Sept 2018
Bolgar International Archeological Field School (BIAFS)
Kazan Federal University (KFU), **Republic of Tatarstan, Russia**

HONORS AND AWARDS

- **Post Graduate Scholarship from Skoltech, Russia** 2020-2022
- **Recipient of Government of Pakistan Merit Scholarship** 2013-2017
- **Member Pakistan's National Robotics Team** 2013
- **Member Pakistan's National Physics Talent Pool** 2012-

COMPETITIONS

- **Spaceport America Cup, IREC, New Mexico, USA** 2020-2021
- **Finding Innovative and Creative Solutions for Society (FICS)** 2017
- **ROBOSPRINT-14**, Center for Advance Studies in Engineering (C@SE) **Oct 2014**
Concept of Robocup
- **Asian Broadcasting Union Robotics Competition - ABU ROBOCON VIETNAM** **Aug 2013**
- **National Science Talent Contest (NSTC)** 2012
Higher Education Commission of Pakistan (HEC)

MAJOR PROJECTS

- **An Approach to Leverage Chat GPT for Product Service Systems Design** 2024
- **Implementation of Model Based Systems Engineering (MBSE) in Product Life Cycle Management (PLM) tools (MSc Thesis)** 2021-2022
- **Mission Planning Tool for Nano Satellites for calculating power budget** June 2021
- **Phase 0, Mission Design Analysis of 12U CubeSat for Detection of Meteorite Impacts Flashes on the far side of Moon orbiting in L2 Halo Orbit (Using MBSE Approaches)** 2021
- **Design of Sounding Rocket having a static/deployable payload** 2020-2021
- **3D Design of Paper Bag Machine for Local Industry** 2019-2020
- **Siemens LMS AMEsim (Advanced Modeling Environment for Simulation)**
 - 1D Modelling and simulation of Flight Dynamics of Agricultural drone using LMS Amesim. (And CFD of Propeller for validation purpose) 2021
 - Modelling, simulation, and analysis of Solid Oxide Fuel Cell (SOFC) of deliver Rover using LMS Amesim. 2021

- One dimensional modelling, analysis and optimization of pneumatic air gun using LMS Amesim design of experiment (DoE) tool 2020
- Optimization of heavy equipment's four point leveling system by one dimensional simulation and analysis using LMS Amesim 2019
- Modelling, analysis, and optimization of underwater ballistic launch system using LMS Amesim 2019
- One dimensional modelling and analysis of three stage synchronous hydraulic cylinder using LMS Amesim 2018
- **Mechanical Design of BCI Controlled Robotic Gait Trainer** 2018
- **Design and Development of Hydraulic Jack buckling Test Bench** 2016-2017
Thesis of Bachelor's in Mechanical Engineering

RESEARCH PUBLICATION

- **Rehman, M. U.**, Machchhar, R. J., & Bertoni, A. (2024). Bridging simulation granularity in system-of-systems: conjunct application of discrete element method and discrete event simulations in construction equipment design. Proceedings of the Design Society, 4, 2705-2714.
- Rehman, M.U., Fortin, C. (2024). An Implementation of Integrated Approach in Product Life-Cycle Management Tool to Ensure Requirements-In-Loop During Complex Product Development: A Cubesat Case Study. In: Danjou, C., Harik, R., Nyffenegger, F., Rivest, L., Bouras, A. (eds) Product Lifecycle Management. Leveraging Digital Twins, Circular Economy, and Knowledge Management for Sustainable Innovation. PLM 2023. IFIP Advances in Information and Communication Technology, vol 701. Springer, Cham. https://doi.org/10.1007/978-3-031-62578-7_21
- Bertoni, A., Juuti, Tero, **Rehman, Mubeen Ur**,.Decision support systems for engineering high variety low volume artefacts. NordDesign2024
- **Rehman, Mubeen Ur**; Bertoni, Alessandro. Investigating Meta Models in Engineering Design: A Systematic Review and Definition Clarification. (To be submitted)
- Jamil, Q., Siddique, A., **Rehman Mubeen Ur.**, Aziz, N., Tiwana, M. "A Brain Controlled Robotic Gait Trainer for Neurorehabilitation". World Academy of Science, Engineering and Technology, Open Science Index 149, International Journal of Medical and Health Sciences, Copenhagen, Denmark (2019), 13(5), 186 - 190.

SKILLS

- **Languages** **Proficiency**
 - English Advanced
 - Urdu Native

- Russian
- Punjabi
- Arabic

A2 Level
Advanced
Basic

▪ **Softwares**

- LMS Amesim, Siemens
- Siemens NX and Team Center
- Dassault 3D Experience (RFLP)
- OpenModelica
- Magic Draw
- PTC CREO
- Solid Works
- Ansys Workbench
- MATLAB/Python/Blender/ STK
- SNAP
- Microsoft Project

Proficiency

Advanced
Intermediate
Basic
Basic
Basic
Advanced
Intermediate
Intermediate
Basic
Basic
Intermediate
