

Shahbaz Khan

Assistant Professor
School of Mechanical & Manufacturing Engineering
Email: shahbaz.khan@smme.nust.edu.pk
Contact:



About

Dr. Shahbaz Khan is working as Assistant Professor in the School of Mechanical & Manufacturing Engineering. Dr. Shahbaz Khan has a PhD in Robotics and AI. Dr. Shahbaz Khan has published 20 research articles & conference papers having a citation count of 283, carried out 0 projects and filed 0 intellectual property.

Qualifications

PhD in Robotics and AI N.W.F.P University of Engineering & Technology Peshawar , Pakistan	2017 - 2022
MS in Product Development Deakin University , Australia	2014 - 2016
BS in Mechatronics N.W.F.P University of Engineering & Technology Peshawar , Pakistan	2008 - 2013

Experience

Assistant Professor School of Mechanical & Manufacturing Engineering	2024- Present
Lecturer University of Engineering and Applied Sciences Swat , UEAS Swat	2022 - 2024
Lab Engineer UET Peshawar , Department of Mechatronics Hayatabad Peshawar	2019 - 2022
Lecturer Hitec University , Hitec University Taxila	2017 - 2019
Maintenance Engineer Rehman Medical Institute , Phase 5 Hayatabad Peshawar	2012 - 2014

Research Articles

From waste to wealth: Transforming Bahrain's households' leftovers into high-quality compost compared to animal-based compost <i>Shaikha Adel Iftikhar Ahmad Adel Aawan Ahmed M. Abdelrhman Shahbaz Khan Syed Asad Imam Subramanian Chithambaram</i> <i>Environmental Progress & Sustainable Energy</i> , Pages 1-9 Impact Factor: 2.100 Quartile: 3 DOI: http://doi.org/10.1002/ep.14646	2025
A Modular System Deploying a Natural Processing Language and Lean Six Sigma (LSS) for Efficient Complaint Resolution System – A Case Study of Pakistan Citizen Portal (PCP) <i>Muhammad Ashraf Shahbaz Khan Mian Hazrat Shah Shoaib Mohammad Muhammad Irfan</i> <i>Journal of Xi'an Shiyou University, Natural Science Edition</i> , Volume 20, Issue 03, Pages 97-108 Impact Factor: N/A DOI: https://www.xisdjxsu.asia/viewarticle.php?aid=3099	2024
Experimental Investigation of Pulse Width Modulation-Based Electromagnetic Vibration Attenuation of a Ferromagnetic Flexible Cantilever Beam (FCB) <i>M. Rizwan Siddiqui Yasir Hameed Shahbaz Khan M. Zulfiqar Saad Khalil Azhar Qazi</i> <i>Journal of Vibration Engineering and Technologies</i> , Volume 12, Pages 309-324 Impact Factor: 2.7 Quartile: 2 DOI: 10.1007/s42417-022-00845-w	2024

Distance and weightage-based identification of most critical and vulnerable locations of surface water pollution in Kabul river tributaries <i>Muhammad Irfan M Mahboob Alam Shahbaz Khan Ilyas Khan Syed M Eldin</i> <i>Scientific Reports</i> , Volume 13, Issue 1, Article Number: 11615 Impact Factor: 4.6 Quartile: 2 Citations: 2 DOI: 10.1038/s41598-023-38018-8	2023
Exploring synchronization and lift suppression in fluid flow around vibrating cylinder: a parallel CFD and global optimization investigation <i>Arshad Mehmood Bashir Salah Syed Sajid Ullah Shahbaz Khan Razaullah Khan</i> <i>Frontiers in Physics</i> , Volume 11, Article Number 1213274 Impact Factor: 3.1 Quartile: 2 DOI: 10.3389/fphy.2023.1213274	2023
Sustainable energy management using the Internet of Things (IoT) <i>Mian Hazrat Shah Shahbaz Khan Asif Khan Ilyas Khan Syed M Eldin</i> <i>PLoS ONE</i> , Volume 18, Issue 6, Article Number Impact Factor: 3.7 Quartile: 2 Citations: 4 DOI: 10.1371/journal.pone.0283754	2023
An Investigation of Exhaust Gas Temperature of Aircraft Engine Using LSTM <i>Shafi Ullah Shuguang Li Khalid Khan Shahbaz Khan Ilyas Khan Syed M Eldin</i> <i>IEEE Access</i> , Volume 11, Pages 5168-5177 Impact Factor: 3.9 Quartile: 2 Citations: 19 DOI: 10.1109/ACCESS.2023.3235619	2023
Dynamic trip point categorisation using manufacturing process for polycrystalline diamond compact bits as case study <i>Zubair Ahmad Khan Khalid Khan Shuja Ahmad Khan Shahbaz Khan Muhammad Tufail Abdel Nasser</i> <i>Journal of Control and Decision</i> , Volume 9, Issue 3, Pages 311-321 Impact Factor: 1.7 (ESCI) Citations: 1 DOI: 10.1080/23307706.2021.1973600	2022
Task allocation in multi-robot system using resource sharing with dynamic threshold approach <i>Nayyer Fazal Muhammad Tahir Khan Shahzad Anwar Javaid Iqbal Shahbaz Khan</i> <i>PLoS ONE</i> , Volume 17(5), Article Number e0267982 Impact Factor: 3.7 Quartile: 2 Citations: 6 DOI: 10.1371/journal.pone.0267982	2022
A model-based approach for detecting and identifying faults on the D.C. side of a P.V. system using electrical signatures from I-V characteristics <i>M. Adnan Khan Khalid Khan Adnan Daud Khan Zubair Ahmad Khan Shahbaz Khan Abdullah Muhammad</i> <i>PLoS One</i> , Volume 17, Issue 3, Article Number e0260771 Impact Factor: 3.7 Quartile: 2 Citations: 5 DOI: 10.1371/journal.pone.0260771	2022
Model-Based Dynamic Categorization of Alarm Trip Points for Manufacturing Process Disruption Minimization <i>Zubair Ahmed Khan Khalid Khan Muhammad Tahir Khan Javaid Iqbal Shahbaz Khan</i> <i>International Journal of Computer Integrated Manufacturing</i> , Pages 1-13 Impact Factor: 4.420 Quartile: 2 DOI: 10.1080/0951192X.2021.1963486	2021
A novel semi-supervised framework for UAV based crop/weed classification <i>Shahbaz Khan Muhammad Tufail Muhammad Tahir Khan Zubair Ahmad Khan Javaid Iqbal Mansoor Alam</i> <i>PLoS One</i> , Volume 16, Issue 5, Article Number e0251008 Impact Factor: 3.752 Quartile: 2 Citations: 55 DOI: 10.1371/journal.pone.0251008	2021
Deep learning-based identification system of weeds and crops in strawberry and pea fields for a precision agriculture sprayer <i>Shahbaz Khan Muhammad Tufail Muhammad Tahir Khan Zubair Ahmad Khan Shahzad Anwar</i> <i>Precision Agriculture</i> , Volume:22, Issue:6, Page:1711-1727 Impact Factor: 5.767 Quartile: 1 Citations: 118 DOI: 10.1007/s11119-021-09808-9	2021

Real-time recognition of spraying area for UAV sprayers using a deep learning approach 2021
Shahbaz Khan Javaid Iqbal Muhammad Tufail Muhammad Tahir Khan Zubair Ahmed Khan Arsalan Wasim
PLoS ONE, Volume 16(4), Article Number e0249436
Impact Factor: 3.752 | **Quartile:** 2 | **Citations:** 53
DOI: 10.1371/journal.pone.0249436

Deep-learning-based spraying area recognition system for unmanned-aerial-vehicle-based sprayers 2021
Shahbaz Khan Muhammad Tufail Muhammad Tahir Khan Zubair Ahmad Khan Shahzad Anwar
Turkish Journal of Electrical Engineering and Computer Sciences, Volume 29, Issue 1, Pages 241-256
Impact Factor: 0.853 | **Quartile:** 4 | **Citations:** 14
DOI: 10.3906/elk-2004-4

Conference Proceedings

System identification of a closed loop mechanical system using physics inspired neural network 2025
Muhammad Yousuf Eisa Muhammad Saqib Nazir Hassan Moin Shahbaz Khan Syed Irtiza Ali Shah Zartasha Mustansar
2025 International Conference on Emerging Technologies in Electronics, Computing, and Communication (ICETECC), res.country(177,)
Citations: N/A
DOI: 10.1109/ICETECC65365.2025.11070267

Investigation of Deep Learning Methods for Disease Detection in Cotton Fields using UAV Imagery 2025
Anwar Iqbal Kunwar Faraz Shahbaz Khan Syed Irtiza Ali Shah Zartasha Mustansar Muhammad Azhar Javeed
IEEE 2nd International Conference on Emerging Technologies in Electronics, Computing and Communication (ICETECC), res.country(177,)
Citations: N/A
DOI: Nil

Book Chapters

An Intelligent Vision-Guided Framework of the Unmanned Aerial System for Precision Agriculture 2023
Shahbaz Khan Muhammad Tufail Muhammad Tahir Khan Zubair Ahmad Khan Javaid Iqbal Razaullah Khan
In: *Book on Computer Vision and Machine Learning in Agriculture*, Volume 3, Chapter 12, Pages 159–176
Citations: N/A
DOI: https://doi.org/10.1007/978-981-99-3754-7_12

A Deep Learning-Based Detection System of Multi-class Crops and Orchards Using a UAV 2022
Shahbaz Khan Muhammad Tufail Muhammad Tahir Khan Zubair Ahmad Khan
In: *Book on Computer Vision and Machine Learning in Agriculture*, Chapter 3, Volume 2, Pages 35-50
Citations: N/A
DOI: https://link.springer.com/chapter/10.1007/978-981-16-9991-7_3

Editorial Activities

Discover Water Reviewed Papers for Journals Impact Factor: Nil	2025
Scientific Reports Reviewed Papers for Journals Impact Factor: 3.8	2025
Precision Agriculture Reviewed Papers for Journals Impact Factor: 5.4	2025
 Reviewed Papers for Journals Impact Factor: 7.9	2025
Computer Applications in Engineering Education Reviewed Papers for Journals Impact Factor: 2	2025
Discover Sustainability Reviewed Papers for Journals Impact Factor: 2.4	2024
Scientific Reports Reviewed Papers for Journals Impact Factor: 3.8	2024

Trainings

AI-Enabled Data Analysis for Accountants and Auditors Partner: NAVTTC Duration: 04-Feb-2025 to 23-May-2025	2025
---	------