Shahbaz Khan

Assistant Professor

School of Mechanical & Manufacturing Engineering

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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 2017 - 2022
N.W.F.P University of Engineering & Technology Peshawar , Pakistan

MS in Product Development 2014 - 2016
Deakin University , Australia

BS in Mechatronics 2008 - 2013
N.W.F.P University of Engineering & Technology Peshawar , Pakistan

Experience

Assistant Professor 2024- Present
School of Mechanical & Manufacturing Engineering

Lecturer 2022 - 2024
University of Engineering and Applied Sciences Swat , UEAS Swat

Lab Engineer 2019 - 2022
UET Peshawar , Department of Mechatronics Hayatabad Peshawar

Lecturer 2017 - 2019
Hitec University , Hitec University Taxila

Maintenance Engineer 2012 - 2014
Rehman Medical Institute , Phase 5 Hayatabad Peshawar

Research Articles

From waste to wealth: Transforming Bahrain's households' leftovers into high-quality compost compared to animal-based compost 2025

Shaikha Adel Iftikhar Ahmad Adel Aawan Ahmed M. Abdelrhman Shahbaz Khan Syed Asad Imam Subramanian Chithambaram

Environmental Progress & Sustainable Energy , Pages 1-9

Impact Factor: 2.100 | **Quartile:** 3

DOI: http://doi.org/10.1002/ep.14646

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) 2024

Muhammad Ashraf Shahbaz Khan Mian Hazrat Shah Shoaib Mohammad Muhammad Irfan

Journal of Xi'an Shiyou University, Natural Science Edition , Volume 20, Issue 03, Pages 97-108

Impact Factor: N/A

DOI: https://www.xisdxjxsu.asia/viewarticle.php?aid=3099

Experimental Investigation of Pulse Width Modulation-Based Electromagnetic Vibration Attenuation of a Ferromagnetic Flexible Cantilever Beam (FCB) 2024

M. Rizwan Siddiqui Yasir Hameed Shahbaz Khan M. Zulfiqar Saad Khalil Azhar Qazi

Journal of Vibration Engineering and Technologies, Volume 12, Pages 309-324

Impact Factor: 2.7 | **Quartile:** 2

DOI: 10.1007/s42417-022-00845-w

Distance and weightage-based identification of most critical and vulnerable locations of surface water pollution in Kabul river tributaries 2023

Muhammad Irfan M Mahboob Alam Shahbaz Khan Ilyas Khan Syed M Eldin

Scientific Reports , Volume 13, Issue 1, Article Number: 11615

Impact Factor: 4.6 | **Quartile:** 2 | **Citations:** 2

DOI: 10.1038/s41598-023-38018-8

Exploring synchronization and lift suppression in fluid flow around vibrating cylinder: a parallel CFD and global optimization investigation 2023

Arshad Mehmood Bashir Salah Syed Sajid Ullah Shahbaz Khan Razaullah Khan

Frontiers in Physics, Volume 11, Article Number 1213274

Impact Factor: 3.1 | **Quartile:** 2

DOI: 10.3389/fphy.2023.1213274

Sustainable energy management using the Internet of Things (IoT) 2023

Mian Hazrat Shah Shahbaz Khan Asif Khan Ilyas Khan Syed M Eldin

PLoS ONE , Volume 18, Issue 6, Article Number

Impact Factor: 3.7 | **Quartile:** 2 | **Citations:** 4

DOI: 10.1371/journal.pone.0283754

An Investigation of Exhaust Gas Temperature of Aircraft Engine Using LSTM 2023

Shafi Ullah Shuguang Li Khalid Khan Shahbaz Khan Ilyas Khan Syed M Eldin

IEEE Access , Volume 11, Pages 5168-5177

Impact Factor: 3.9 | **Quartile:** 2 | **Citations:** 19

DOI: 10.1109/ACCESS.2023.3235619

Dynamic trip point categorisation using manufacturing process for polycrystalline diamond compact bits as case study 2022

Zubair Ahmad Khan Khalid Khan Shuja Ahmad Khan Shahbaz Khan Muhammad Tufail Abdel Nasser

Journal of Control and Decision, Volume 9, Issue 3, Pages 311-321

Impact Factor: 1.7 (ESCI) | **Citations:** 1

DOI: 10.1080/23307706.2021.1973600

Task allocation in multi-robot system using resource sharing with dynamic threshold approach 2022

Nayyer Fazal Muhammad Tahir Khan Shahzad Anwar Javaid Iqbal Shahbaz Khan

PLoS ONE , Volume 17(5), Article Number e0267982

Impact Factor: 3.7 | **Quartile:** 2 | **Citations:** 6

DOI: 10.1371/journal.pone.0267982

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 2022

M. Adnan Khan Khalid Khan Adnan Daud Khan Zubair Ahmad Khan Shahbaz Khan Abdullah Muhammad

PLoS One , Volume 17, Issue 3, Article Number e0260771

Impact Factor: 3.7 | **Quartile:** 2 | **Citations:** 5

DOI: 10.1371/journal.pone.0260771

Model-Based Dynamic Categorization of Alarm Trip Points for Manufacturing Process Disruption Minimization 2021

Zubair Ahmed Khan Khalid Khan Muhammad Tahir Khan Javaid Iqbal Shahbaz Khan

International Journal of Computer Integrated Manufacturing, Pages 1-13

Impact Factor: 4.420 | **Quartile:** 2

DOI: 10.1080/0951192X.2021.1963486

A novel semi-supervised framework for UAV based crop/weed classification 2021

Shahbaz Khan Muhammad Tufail Muhammad Tahir Khan Zubair Ahmad Khan Javaid Iqbal Mansoor Alam

PLoS One , Volume 16, Issue 5, Article Number e0251008

Impact Factor: 3.752 | **Quartile:** 2 | **Citations:** 55

DOI: 10.1371/journal.pone.0251008

Deep learning-based identification system of weeds and crops in strawberry and pea fields for a precision agriculture sprayer 2021

Shahbaz Khan Muhammad Tufail Muhammad Tahir Khan Zubair Ahmad Khan Shahzad Anwar

Precision Agriculture , Volume:22, Issue:6, Page:1711-1727

Impact Factor: 5.767 | **Quartile:** 1 | **Citations:** 118

DOI: 10.1007/s11119-021-09808-9

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 2025
Reviewed Papers for Journals
Impact Factor: Nil

Scientific Reports 2025
Reviewed Papers for Journals
Impact Factor: 3.8

Precision Agriculture 2025
Reviewed Papers for Journals
Impact Factor: 5.4

2025
Reviewed Papers for Journals
Impact Factor: 7.9

Computer Applications in Engineering Education 2025
Reviewed Papers for Journals
Impact Factor: 2

Discover Sustainability 2024
Reviewed Papers for Journals
Impact Factor: 2.4

Scientific Reports 2024
Reviewed Papers for Journals
Impact Factor: 3.8

Trainings

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