

# Muhammad Iqbal

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## About

Dr. Muhammad Iqbal is working as Assistant Professor in the School of Interdisciplinary Engineering & Sciences. Dr. Muhammad Iqbal has a PhD in Systems Engineering. Dr. Muhammad Iqbal has published 23 research articles & conference papers having a citation count of 627, carried out 0 projects and filed 0 intellectual property.

## Qualifications

<b>PhD in Systems Engineering</b> University of Brunei Darussalam , Brunei Darussalam	2017 - 2020
<b>MS in Automation and Control</b> N.W.F.P University of Engineering & Technology Peshawar , Pakistan	2013 - 2016
<b>BS in Computer Engineering</b> COMSATS Institute of Information Technology , Pakistan	2008 - 2012

## Experience

<b>Assistant Professor</b> School of Interdisciplinary Engineering & Sciences	2024- Present
<b>Assistant Professor</b> Khwaja Fareed University of Engineering and Information Technology , Rahim Yar Khan	2021 - 2024
<b>Resident Engineer</b> Jaffar Brother/ ZONG , Islamabad	2013 - 2014

## Research Articles

<b>Advanced Feature Extraction for Cervical Cancer Image Classification: Integrating Neural Feature Extraction and AutoInt Models</b> <i>Muhammad Iqbal Sandra Dudley Afia Zafar Kainat Zafar Adil Ali Saleem Hafeez Ur Rehman Siddiqui Muhammad Amjad Raza</i> <i>Sensors</i> , Volume:25(9), Article Number:2826, Pages:22 <b>Impact Factor:</b> 3.5   <b>Quartile:</b> 2 <b>DOI:</b> 10.20944/preprints202411.0203	2025
<b>IoT-driven smart agricultural technology for real-time soil and crop optimization</b> <i>Muhammad Iqbal Hammad Shahab Muhammad Naeem Muhammad Aqeel Syed Sajid Ullah</i> <i>Smart Agricultural Technology</i> , Volume:10, Article Number 100847 <b>Impact Factor:</b> 5.7   <b>Quartile:</b> 1   <b>Citations:</b> 14 <b>DOI:</b> 10.1016/j.atech.2025.100847	2025
<b>Milk adulteration identification using hyperspectral imaging and machine learning</b> <i>Muhammad Iqbal Syed Sajid Ullah Muhammad Aqeel Ahmed Sohaib</i> <i>Journal of Dairy Science</i> , Volume: 108, Issue: 2, Pages:1301-1314 <b>Impact Factor:</b> 3.7   <b>Quartile:</b> 1   <b>Citations:</b> 7 <b>DOI:</b> https://doi.org/10.3168/jds.2024-25635	2025
<b>A Synergistic Approach to Colon Cancer Detection: Leveraging EfficientNet and NSGA-II for Enhanced Diagnostic Performance</b> <i>Noushin Saba Afia Zafar Mohsin Suleman Kainat Zafar Shahneer Zafar Adil Ali Saleem Hafeez Ur Rehman Siddiqui Muhammad Iqbal Syed Sajid Ullah</i> <i>IEEE Access</i> , Volume 12, Pages 192264-192278 <b>Impact Factor:</b> 3.400   <b>Quartile:</b> 2 <b>DOI:</b> 10.1109/ACCESS.2024.3519216	2024

<b>Hyperspectral Identification of Milk Adulteration Using Advance Deep Learning</b> <i>Muhammad Iqbal Syed Sajid Ullah Ahmed Sohaib Muhammad Aqeel</i> <i>IEEE Access</i> , Volume 12, Pages 174965-174982 <b>Impact Factor:</b> 3.400   <b>Quartile:</b> 2   <b>Citations:</b> 2 <b>DOI:</b> 10.1109/ACCESS.2024.3504334	2024
<b>Design and implementation of an IoT-based monitoring system for early detection of lumpy skin disease in cattle</b> <i>Muhammad Iqbal Hammad Shahab Ahmed Sohaib Atiq ur Rehman Amine Bermak Kashif Munir</i> <i>Smart Agricultural Technology</i> , Volume 9, Article Number 100609 <b>Impact Factor:</b> 6.300   <b>Quartile:</b> 1   <b>Citations:</b> 4 <b>DOI:</b> 10.1016/j.atech.2024.100609	2024
<b>Design, Development, and Testing of Microplanar Coil-Based Hydrokinetic Electromagnetic-Type Energy Harvester for IoT Sensors</b> <i>Muhammad Iqbal Iftikhar Ahmad Maryam Abbas Ahmed M. Abdelrhman Subramanian Chithambaram Syed Asad Imam Mahmood Hammad Muneeb Ullah Anjum</i> <i>Journal of Engineering</i> , Volume 2024, Article ID 1985367, 13 pages <b>Impact Factor:</b> 1.700   <b>Quartile:</b> 2 <b>DOI:</b> 10.1155/2024/1985367	2024
<b>Ultra-Wide Band Radar Empowered Driver Drowsiness Detection with Convolutional Spatial Feature Engineering and Artificial Intelligence</b> <i>Muhammad Iqbal Hafeez Ur Rehman Siddiqui Ambreen Akmal Adil Ali Saleem Muhammad Amjad Raza Kainat Zafar Aqsa Zaib Sandra Dudley Jon Arambarri Ángel Kuc Castilla Furqan Rustam</i> <i>Sensors</i> , Volume 24, Issue 12, Article Number 3754 <b>Impact Factor:</b> 3.400   <b>Quartile:</b> 2   <b>Citations:</b> 4 <b>DOI:</b> 10.3390/s24123754	2024
<b>Hyperspectral identification of oil adulteration using machine learning techniques</b> <i>Muhammad Iqbal Muhammad Aqeel Ahmed Sohaib Hafeez Ur Rehman Siddiqui Furqan Rustam</i> <i>Current Research in Food Science</i> , Volume 8, Article Number 100773 <b>Impact Factor:</b> 6.200   <b>Quartile:</b> 1   <b>Citations:</b> 16 <b>DOI:</b> 10.1016/j.crfs.2024.100773	2024
<b>Hybrid acoustic, vibration, and wind energy harvester using piezoelectric transduction for self-powered wireless sensor node applications</b> <i>Izhar Muhammad Iqbal Farid Khan</i> <i>Energy Conversion and Management</i> , Volume 277, Article Number 116635 <b>Impact Factor:</b> 9.900   <b>Quartile:</b> 1   <b>Citations:</b> 32 <b>DOI:</b> 10.1016/j.enconman.2022.116635	2023
<b>Power harvesting footwear based on piezo-electromagnetic hybrid generator for sustainable wearable microelectronics</b> <i>Muhammad Iqbal Farid Ullah Khan Murtuza Mehdi Quentin Cheok Emeroylariffion Abas Malik Muhammad Nauman</i> <i>Journal of King Saud University - Engineering Sciences</i> , Volume 34, Issue 5, Pages 329-338 <b>Impact Factor:</b> N/A   <b>Citations:</b> 12 <b>DOI:</b> 10.1016/j.jksues.2020.11.003	2022
<b>A Pressure-Based Electromagnetic Energy Harvester for Pipeline Monitoring Applications</b> <i>Muhammad Iqbal Sadia Bakhtiar Farid Ullah Khan Wahad Ur Rahman Atif Sardar Khan Muhammad Masood Ahmad</i> <i>Journal of Sensors</i> , Volume 2022, Article ID 6529623, 16 pages <b>Impact Factor:</b> 1.900   <b>Quartile:</b> 3   <b>Citations:</b> 9 <b>DOI:</b> https://doi.org/10.1155/2022/6529623	2022
<b>Nonlinear multi-mode electromagnetic insole energy harvester for human-powered body monitoring sensors: Design, modeling, and characterization</b> <i>Muhammad Iqbal Malik Muhammad Nauman Farid Ullah Khan Emeroylariffion Abas Quentin Cheok Brahim Aissa</i> <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , Volume 235, Issue 22, Pages 6415-6426 <b>Impact Factor:</b> 1.758   <b>Quartile:</b> 3   <b>Citations:</b> 13 <b>DOI:</b> 10.1177/0954406221991178	2021
<b>Multimodal hybrid piezoelectric-electromagnetic insole energy harvester using PVDF generators</b> <i>Muhammad Iqbal Malik Muhammad Nauman Farid Ullah Khan Pg Emeroylariffion Abas Quentin Cheok Asif Iqbal Brahim Aissa</i> <i>Electronics</i> , Volume 9, Issue 4, Article Number 635	2020

**Impact Factor:** 2.397 | **Quartile:** 3 | **Citations:** 46  
**DOI:** 10.3390/electronics9040635

**Slot-die coated active carbon films for hydrogen storage applications**

2019

*Muhammad Iqbal M. M Nauman K. H Choi M. Mehdi A. Iqbal A.F. Rafique Q.C.H. Nam J.H. Zaini*  
*Acta Physica Polonica A*, Volume 135, Issue 4, Pages 705-712

**Impact Factor:** 0.579 | **Quartile:** 4 | **Citations:** 3  
**DOI:** 10.12693/APhysPolA.135.705

**Hybrid vibration and wind energy harvesting using combined piezoelectric and electromagnetic conversion for bridge health monitoring applications**

2018

*Muhammad Iqbal Farid Ullah Khan*  
*Energy Conversion and Management*, Volume 172, Pages 611-618

**Impact Factor:** 7.181 | **Quartile:** 1 | **Citations:** 207  
**DOI:** 10.1016/j.enconman.2018.07.044

**Electromagnetic Bridge Energy Harvester Utilizing Bridge's Vibrations and Ambient Wind for Wireless Sensor Node Application**

2018

*Farid Ullah Khan Muhammad Iqbal*  
*Journal of Sensors*, Volume 2018, Article ID 3849683, 18 pages

**Impact Factor:** 2.024 | **Quartile:** 2 | **Citations:** 49  
**DOI:** 10.1155/2018/3849683

**Fuzzy logic approach for investigation of microstructure and mechanical properties of Sn96.5-Ag3.0-Cu0.5 lead free solder alloy**

2017

*Muhammad Aamir Izhar Muhammad Waqas Muhammad Iqbal Muhammad Imran Hanif Riaz Muhammad*  
*Soldering & Surface Mount Technology*, Volume 29, Issue 4, Pages 191-198

**Impact Factor:** 1.137 | **Quartile:** 3 | **Citations:** 17  
**DOI:** 10.1108/SSMT-02-2017-0005

**Development of a testing rig for vibration and wind based energy harvesters**

2016

*Muhammad Iqbal Farid Ullah Khan*  
*Journal of Engineering & Applied Sciences (JEAS)*, Vol. 35 No. 2, Pages 101-110

**Impact Factor:** N/A  
**DOI:** 10.25211/JEAS.V35I2.2064

## Conference Proceedings

**Electromagnetic-based bridge energy harvester using traffic-induced bridge's vibrations and ambient wind**

2016

*Muhammad Iqbal Farid Ullah Khan*  
*2016 International Conference on Intelligent Systems Engineering, ICISE 2016*, res.country(177,)

**Citations:** N/A  
**DOI:** 10.1109/INTELSE.2016.7475152