

Ayesha Zeb

Assistant Professor

College of Electrical & Mechanical Engineering

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About

Dr. Ayesha Zeb is working as Assistant Professor in the College of Electrical & Mechanical Engineering. Dr. Ayesha Zeb has a PhD in Artificial Intelligence. Dr. Ayesha Zeb has published 34 research articles & conference papers having a citation count of 254, carried out 0 projects and filed 1 intellectual property.

Qualifications

PhD in Artificial Intelligence NUST, Islamabad , Pakistan	2018 - 2022
MS in Dsp And Communication NUST, Islamabad , Pakistan	2014 - 2016
BS in Electronics Engineering International Islamic University , Pakistan	2010 - 2014

Experience

Assistant Professor College of Electrical & Mechanical Engineering	2022- Present
Lecturer College of Electrical & Mechanical Engineering	2016 - 2022
Visiting Lecturer IIUI , IIUI	2014 - 2016

Awards

Gold Medal Gold Medal in BSEE by IIUI	2016
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Research Articles

Future-frame prediction for coastal land cover using Remote Sensing data and deep learning Sarmad Ahmad Ayesha Zeb Sara Ayouni Waqar Shahid Qureshi Hassan Akbar International Journal of Remote Sensing, Pages 1-22 Impact Factor: 2.600 Quartile: 2 DOI: https://doi.org/10.1080/01431161.2025.2540617	2025
An optimized Impulse Factor-based VMD-EMD approach to improve SSVEP accuracy for BCI Systems Umar Shahbaz Khan Tahir Habib Nawaz Ayesha Zeb Adeel Wahab Syed Tayyab Hussain Shah U. Izhar Results in Engineering, Volume:25, Article Number:104203, Pages:14 Impact Factor: 6 Quartile: 1 Citations: 4 DOI: https://doi.org/10.1016/j.rineng.2025.104203	2025
Aerial imagery-based tobacco plant counting framework for efficient crop emergence estimation Ramsha Shahid Waqar Shahid Qureshi Umar Shahbaz Khan Arslan Munir Ayesha Zeb Syed Imran Moazzam Computers and electronics in agriculture, Volume 217, Article Number: 108557 Impact Factor: 7.7 Quartile: 1 Citations: 17 DOI: 10.1016/j.compag.2023.108557	2024
New FxLMAT based Algorithms for Active Control of Impulsive Noise Alina Mirza Farkhanda Afzal Ayesha Zeb Abdul Wakeel Waqar Shahid Qureshi Ali Akgul IEEE Access, Volume 11, Pages 81279-81288	2023

Impact Factor: 3.9 Quartile: 2 Citations: 8 DOI: 10.1109/ACCESS.2023.3293647	
Towards sweetness classification of orange cultivars using short-wave NIR spectroscopy <i>Ayesha Zeb Waqar Shahid Qureshi Abdul Ghafoor Aman Ullah Malik Muhammad Imran Alina Mirza Mohsin Islam Tiwana Eisa Alanazi</i> <i>Scientific Reports</i> , Volume 13, Issue 1, Article Number 325 Impact Factor: 4.996 Quartile: 2 Citations: 17 DOI: https://doi.org/10.1038/s41598-022-27297-2	2023
A new method for pixel classification for rice variety identification using spectral and time series data from Sentinel-2 satellite imagery <i>Usman Rauf Waqar Shahid Qureshi Hamid Jabbar Ayesha Zeb Alina Mirza Eisa Alanazi Umar Shahbaz Khan Nasir Rashid</i> <i>Computers and electronics in agriculture</i> , Volume 193, Article Number 106731 Impact Factor: 5.565 Quartile: 1 Citations: 16 DOI: https://doi.org/10.1016/j.compag.2022.106731	2022
FxRLS Algorithms Based Active Control of Impulsive Noise with Online Secondary Path Modeling <i>Fareeha Jabeen Alina Mirza Ayesha Zeb Muhammad Imran Farkhanda Afzal Ayesha Maqbool</i> <i>IEEE Access</i> , Volume 9, Pages 117471-117485 Impact Factor: 3.476 Quartile: 2 Citations: 9 DOI: 10.1109/ACCESS.2021.3105902	2021
Mango maturity classification instead of maturity index estimation: A new approach towards handheld NIR spectroscopy <i>Syed Sohaib Ali Shah Ayesha Zeb Waqar Shahid Amanullah Malik Mohsin Tiwana Kerry Walsh Muhammad Amin Waleed Alasmay Eisa Alanazai</i> <i>Infrared Physics and Technology</i> , Volume 115, Article Number 103639 Impact Factor: 2.997 Quartile: 2 Citations: 36 DOI: https://doi.org/10.1016/j.infrared.2021.103639	2021
Is this melon sweet? A quantitative classification for near-infrared spectroscopy <i>Ayesha Zeb Waqar Shahid Qureshi Abdul Ghafoor Amanullah Malik Muhammad Imran Javaid Iqbal Eisa Alanazi</i> <i>Infrared Physics and Technology</i> , Volume 114, Article Number 103645 Impact Factor: 2.997 Quartile: 2 Citations: 23 DOI: https://doi.org/10.1016/j.infrared.2021.103645	2021
Towards Fruit Maturity Estimation Using NIR Spectroscopy <i>Syed Sohaib Ali shah Ayesha Zeb Eisa Alanazi Waleed Alasmay Amanullah Malik Muhammad Arslan Waqar Shahid</i> <i>Infrared Physics and Technology</i> , Volume 111 Impact Factor: 2.638 Quartile: 2 Citations: 76 DOI: https://doi.org/10.1016/j.infrared.2020.103479	2020
Less complex solutions for active noise control of impulsive noise <i>Alina Mirza Ayesha Zeb Mir Yasir Umair Danish Ilyas Shahzad Amin Sheikh</i> <i>Analog Integrated Circuits and Signal Processing</i> , Volume 102, Pages 507–521 Impact Factor: 1.337 Quartile: 4 DOI: https://doi.org/10.1007/s10470-019-01565-0(0123456789().,-volV)(0123456789().,-volV)	2020
New hybrid technique for impulsive noise suppression in OFDM systems <i>Alina Mirza Ayesha Zaib Shahzad Amin Sheikh</i> <i>Mehran University Research Journal of Engineering & Technology</i> , ISSN:0254-7821, EISSN:2413-7219, , Jul 2017, Volume 36, Issue 3, Pages 543-558 Impact Factor: - DOI: 10.22581/muet1982.1703.11	2017
Improving performance of FxRLS algorithm for active noise control of impulsive noise <i>Qasim Umar Khan Ayesha Zeb Alina Mirza Shahzad Amin Sheikh</i> <i>Applied Acoustics</i> , Volume: 116 Pages: 364-374 Impact Factor: 1.721 Quartile: 2 Citations: 40 DOI: 10.1016/j.apacoust.2016.10.011	2017
Robust adaptive algorithm for active control of Impulsive Noise <i>Ayesha Zeb Alina Mirza Shahzad Amin Sheikh</i> <i>EURASIP Journal of Advances in Signal Processing</i> , Article Number: 44 Impact Factor: 1.961 Quartile: 2 Citations: 8 DOI: 10.1186/s13634-016-0344-0	2016

Comparative Performance and Resource Utilization Analysis of OCR Models for Number Plate Recognition on Raspberry Pi 4 <i>Noman Shabbir Rameel Ahmed Muhammad Wasif Raza Ayesha Zeb Hassan Elahi Hasan</i> 2025 International Conference on Communication Technologies, ComTech 2025, res.country(177,) Citations: N/A DOI: 10.1109/ComTech65062.2025.11034455	2025
Performance Evaluation of Modern Object Detection Models for Automated Fruit Recognition in Smart Agriculture <i>Usman Asad Ayesha Zeb Sarmad Ahmad Saad Bin Imran</i> 2025 11th International Conference on Mechatronics and Robotics Engineering, ICMRE 2025, res.country(75,) Citations: N/A DOI: 10.1109/ICMRE64970.2025.10976263	2025
Evaluation of Model Degradation in PaddleOCR, UItOCR, and TrOCR Across Baseline and TensorFlow Lite Environments <i>Rameel Ahmed Noman Shabbir Muhammad Wasif Raza Ayesha Zeb Hassan Elahi</i> 6th International Conference on Robotics and Automation in Industry, res.country(177,) Citations: N/A DOI: 10.1109/ICRAI62391.2024.10894257	2024
A Lightweight CNN for RGB-D Grasp Classification in Computer Vision-Based Prosthetic Hands <i>Umar Farooq Wajdan Ali Khan Ayesha Zeb Izna Awais Mohsin Islam Tiwana Muhammad Qasim Tariq</i> 6th International Conference on Robotics and Automation in Industry, res.country(177,) Citations: N/A DOI: 10.1109/ICRAI62391.2024.10894378	2024
A Soft Robotics Approach to Prosthetic Hands: Integrating 3D Printing Techniques and Embedded Vision <i>Wajdan Ali Khan Umar Farooq Ayesha Zeb Izna Awais Muhammad Qasim Tariq Mohsin Islam Tiwana</i> 6th International Conference on Robotics and Automation in Industry, res.country(177,) Citations: N/A DOI: 10.1109/ICRAI62391.2024.10894254	2024
MASA: Multi Agent Situational Awareness for Visually Impaired <i>Zaid Mahboob Salman Sadiq Umar Shahbaz Khan Ayesha Zeb Mohsin Islam Tiwana</i> Proceedings of 2024 21st International Bhurban Conference on Applied Sciences and Technology, IBCAST 2024, res.country(177,) Citations: N/A DOI: 10.1109/IBCAST61650.2024.10877205	2024
YOLO v5, v7 and v8: A Performance Comparison for Tobacco Detection in Field <i>Zaid Mahboob Ayesha Zeb Umar Shahbaz Khan</i> 2023 International Conference on Digital Futures and Transformative Technologies, ICoDT2 2023, res.country(177,) Citations: N/A DOI: 10.1109/ICoDT259378.2023.10325705	2023
Analysis of rule-based and shallow statistical models for COVID-19 cough detection for a preliminary diagnosis <i>Arshia Arif Eisa Alanazi Ayesha Zeb Waqar Shahid Qureshi</i> 2022 13th Asian Control Conference (ASCC), res.country(259,) Citations: N/A DOI: 10.23919/ASCC56756.2022.9828183	2022
Learning Fruit Class from Short Wave Near Infrared Spectral Features, an AI Approach Towards Determining Fruit Type <i>Ayesha Zeb Waqar Shahid Qureshi Abdul Ghafoor Dymrna O' Sullivan</i> 2022 8th International Conference on Mechatronics and Robotics Engineering, ICMRE 2022, res.country(57,) Citations: N/A DOI: 10.1109/ICMRE54455.2022.9734107	2022
Characterization of Motor Imagery based EEG signals with Hilbert Transform <i>Umar Farooq Malik Nasir Rashid Rabia Awais Khan Muhammad Shahzaib Arshia Arif Ayesha Zeb</i> 2021 International Conference on Robotics and Automation in Industry (ICRAI), res.country(282,)	2021

Citations: N/A DOI: 10.1109/ICRAI54018.2021.9651412	
Design and Development of Motor Controller and Electronic Differential System for Electric Vehicle Conversion <i>Uzair Khaleeq uz Zaman Umar Shahbaz Khan Anas Bin Aqeel Ayesha Zeb Syed Hassan Ali Usama Athar Elizay Jehangir Muhammad Mubasher Saif</i> 2021 <i>International Conference on Robotics and Automation in Industry (ICRAI)</i> , res.country(177,)	2021
Citations: N/A DOI: 10.1109/ICRAI54018.2021.9651444	
A Modified Filtered-x LMAT Algorithm for Active Noise Control of Impulsive Noise <i>Abid Hussain Alina Mirza Ayesha Zeb Mir Yasir Umair Abid Hussain Alina Mirza Ayesha Zeb Mir Yasir Umair Abid Hussain</i> <i>IEEE International Symposium on Signal Processing and Information Technology (ISSPIT)</i> , res.country(2,)	2019
Citations: N/A DOI: 10.1109/ISSPIT47144.2019.9001759	
Motor Imagery based Multivariate EEG Signal Classification for Brain Controlled Interface Applications <i>Fatima Farooq Nasir Rashid Amber Farooq Muzamil Ahmed Ayesha Zeb Javaid Iqbal Fatima Farooq Nasir Rashid Amber Farooq Muzamil Ahmed Ayesha Zeb Javaid Iqbal</i> 7th <i>International Conference on Mechatronics Engineering (ICOM)</i> (pp. 1-6). <i>IEEE</i> , 2019, res.country(157,)	2019
Citations: N/A DOI: DOI: 10.1109/ICOM47790.2019.8952008	
Power Line Interference Cancellation from EEG Signals using RLS Algorithm <i>Muzammil Ahmed Amber Farooq Fatima Farooq Nasir Rashid Ayesha Zeb Muzammil Ahmed Amber Farooq Fatima Farooq Nasir Rashid Ayesha Zeb</i> <i>Muzammil Ahmed Amber Farooq Fatima Farooq</i> 2019 <i>International Conference on Robotics and Automation in Industry (ICRAI)</i> , res.country(177,)	2019
Citations: N/A DOI: 10.1109/ICRAI47710.2019.8967392	
Performance Comparison of Adaptive Power Line Interference Cancellers for ECG Signal <i>Suleman Tahir Nauman Razzaq Ayesha Zeb Muneeb Masood Raja Suleman Tahir Nauman Razzaq Ayesha Zeb Muneeb Masood Raja</i> <i>International Conference on Robotics and Automation in Industry (ICRAI)</i> , res.country(177,)	2019
Citations: N/A DOI: 10.1109/ICRAI47710.2019.8967400	
Automated greenhouse system <i>Umar Shahbaz Khan Ayesha Zeb Muhammad Raees Armughati Azhar Muhammad Hamid Muhammad Hamza Irfan Muhammad Awais</i> 2nd <i>International Conference on Communication, Computing and Digital systems (C-CODE)</i> , res.country(177,)	2019
Citations: N/A DOI: 10.1109/C-CODE.2019.8681013	
The Voice Enabled Stick, an Embedded Device for Active Guidance of Visually Impaired Pedestrians <i>Hafiz M. U. Munir Fahad Mahmood Ayesha Zeb Fahad Mehmood Umar S. Khan Javaid Iqbal</i> 20th <i>International Conference on Computer & Information Technology (ICCIT)</i> , res.country(19,)	2017
Citations: N/A DOI: https://ieeexplore.ieee.org/abstract/document/8281844	
SSLMS Algorithm based Impulsive Noise Cancellation from ECG Signal <i>Ayesha Zeb Javeria Habib Alina Mirza Shahzad A. Sheikh</i> 2016 <i>International Conference on Multimedia Systems and Signal Processing</i> , res.country(227,)	2016
Citations: N/A DOI: 10.1109/ICMSSP.2016.010	
Filtered-x RLS Algorithm based Active-Noise-Control of Impulsive Noise <i>Shahzad Amin Sheikh Ayesha Zeb Alina Mirza</i> 2015 7th <i>International Conference on Modelling, Identification and Control (ICMIC)</i> , res.country(221,)	2015
Citations: N/A DOI: 10.1109/ICMIC.2015.7409414	
Filtered-x RLS Algorithm based Active Noise Control of Impulsive Noise <i>Ayesha Zeb Alina Mirza Shahzad A. Sheikh</i> 7th <i>International Conference on Modelling, Identification and Control (ICMIC 2015)</i> , res.country(221,)	2015
Citations: N/A DOI: 10.1109/ICMIC.2015.7409414	

Editorial Activities

Journal of analytical methods in chemistry Reviewed Papers for Journals Impact Factor: 2.6	2024
Computers and Electronics in Agriculture Reviewed Papers for Journals Impact Factor: 8.3	2024
IEEE Access Reviewed Papers for Journals Impact Factor: 3.9	2023
Postharvest Biology and Technology Reviewed Papers for Journals Impact Factor: 7.0	2023
Infrared Physics & Technology Reviewed Papers for Journals Impact Factor: 3.3	2023
 Reviewed Papers for Journals Impact Factor: 2.871	2020
 Reviewed Papers for Journals Impact Factor: 2.44	2020
 Reviewed Papers for Journals	2019
 Reviewed Papers for Journals	2019
 Reviewed Papers for Journals Impact Factor: 4.098	2019

Intellectual Property

Copyrights

Patents

An Adaptive AI enabled System for Navigation of Visually Impaired Persons Status: Filed	2024
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