

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

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

Experience

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

Awards

<b>Gold Medal</b> Gold Medal in BSEE by IIUI	2016
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Research Articles

<b>Future-frame prediction for coastal land cover using Remote Sensing data and deep learning</b> 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
<b>An optimized Impulse Factor-based VMD-EMD approach to improve SSVEP accuracy for BCI Systems</b> 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
<b>Aerial imagery-based tobacco plant counting framework for efficient crop emergence estimation</b> 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
<b>New FxLMAT based Algorithms for Active Control of Impulsive Noise</b> Alina Mirza Farkhanda Afzal Ayesha Zeb Abdul Wakeel Waqar Shahid Qureshi Ali Akgul IEEE Access, Volume 11, Pages 81279-81288	2023

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

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

<b>Citations:</b> N/A <b>DOI:</b> 10.1109/ICRAI54018.2021.9651412	
<b>Design and Development of Motor Controller and Electronic Differential System for Electric Vehicle Conversion</b> <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
<b>Citations:</b> N/A <b>DOI:</b> 10.1109/ICRAI54018.2021.9651444	
<b>A Modified Filtered-x LMAT Algorithm for Active Noise Control of Impulsive Noise</b> <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
<b>Citations:</b> N/A <b>DOI:</b> 10.1109/ISSPIT47144.2019.9001759	
<b>Motor Imagery based Multivariate EEG Signal Classification for Brain Controlled Interface Applications</b> <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
<b>Citations:</b> N/A <b>DOI:</b> DOI: 10.1109/ICOM47790.2019.8952008	
<b>Power Line Interference Cancellation from EEG Signals using RLS Algorithm</b> <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
<b>Citations:</b> N/A <b>DOI:</b> 10.1109/ICRAI47710.2019.8967392	
<b>Performance Comparison of Adaptive Power Line Interference Cancellers for ECG Signal</b> <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
<b>Citations:</b> N/A <b>DOI:</b> 10.1109/ICRAI47710.2019.8967400	
<b>Automated greenhouse system</b> <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
<b>Citations:</b> N/A <b>DOI:</b> 10.1109/C-CODE.2019.8681013	
<b>The Voice Enabled Stick, an Embedded Device for Active Guidance of Visually Impaired Pedestrians</b> <i>Hafiz M. U. Munir Fahad Mahmood Ayesha Zeb Fahad Mehmood Umar S. Khan Javaid Iqbal</i> 20th <i>International Conference on Computer &amp; Information Technology (ICCIT)</i> , res.country(19,)	2017
<b>Citations:</b> N/A <b>DOI:</b> <a href="https://ieeexplore.ieee.org/abstract/document/8281844">https://ieeexplore.ieee.org/abstract/document/8281844</a>	
<b>SSLMS Algorithm based Impulsive Noise Cancellation from ECG Signal</b> <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
<b>Citations:</b> N/A <b>DOI:</b> 10.1109/ICMSSP.2016.010	
<b>Filtered-x RLS Algorithm based Active-Noise-Control of Impulsive Noise</b> <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
<b>Citations:</b> N/A <b>DOI:</b> 10.1109/ICMIC.2015.7409414	
<b>Filtered-x RLS Algorithm based Active Noise Control of Impulsive Noise</b> <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
<b>Citations:</b> N/A <b>DOI:</b> 10.1109/ICMIC.2015.7409414	

Editorial Activities

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

Intellectual Property

Copyrights

Patents

<b>An Adaptive AI enabled System for Navigation of Visually Impaired Persons</b> <b>Status:</b> Filed	2024
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Industrial Designs

Trademarks