

Ata Ur Rehman

Associate Professor

Military College of Signals

Email: a.ur.rehman@mcs.nust.edu.pk

Contact:

LinkedIn: <https://www.linkedin.com/in/ata-ur-rehman-73361635/>



About

Dr. Ata Ur Rehman is working as Associate Professor in the Military College of Signals. Dr. Ata Ur Rehman has a PhD in Machine Learning And Computer Vision. Dr. Ata Ur Rehman has published 27 research articles & conference papers having a citation count of 212, carried out 0 projects and filed 0 intellectual property.

Qualifications

PhD in Machine Learning And Computer Vision	2010 - 2014
Loughborough University , United Kingdom	
MSc in Digital Communication Systems	2009 - 2010
Loughborough University , United Kingdom	
BS in Electronics	2002 - 2007
Air University , Pakistan	

Experience

Associate Professor	2024- Present
Military College of Signals	
Associate Professor	2021 - 2021
Military College of Signals	
Associate Professor	2021 - 2021
Military College of Signals	
Assistant Professor	2016 - 2021
UET Lahore , UET Lahore	
Post-Doc	2013 - 2016
University of Sheffield , University of Sheffield	
Lecturer	2007 - 2016
UET Lahore , UET Lahore	

Research Articles

A Recurrent Neural Network for Multimodal Anomaly Detection by Using Spatio-Temporal Audio-Visual Data	2024
Sameema Tariq Ata Ur Rehman Maria Abubakar Waseem Iqbal Hatoon S. Alsagri Yousef A. Alduraywish Haya Abdullah A. Alhakbani	
Computers, Materials & Continua , Volume:81, Issue:2, Page:2493-2515	
Impact Factor: 2.000 Quartile: 3 Citations: 1	
DOI: https://doi.org/10.32604/cmc.2024.055787	
Triple-0: Zero-shot denoising and dereverberation on an end-to-end frozen anechoic speech separation network	2024
Ata Ur Rehman Sania Gul Muhammad Salman Khan	
PLoS ONE , Volume:19, Issue:7, Article Number e0301692	
Impact Factor: 2.900 Quartile: 1	
DOI: https://doi.org/10.1371/journal.pone.0301692	
DEW: A wavelet approach of rare sound event detection	2024
Ata-ur-Rehman Muhammad Salman Khan Sania Gul	
PLoS ONE , Volume 19, Issue 3, Article Number e0300444	

Impact Factor: 3.700 Quartile: 2 Citations: 1 DOI: https://doi.org/10.1371/journal.pone.0300444	
Cognition based Recognition of Partially Occluded Traffic Signs <i>Abdul Mannan Kashif Javed Ata Ur Rehman Haroon A. Babri Seroosh K Noon</i> <i>Scientia Iranica</i> , Volume 29, Issue 4 Impact Factor: 1.435 Quartile: 3 Citations: 2 DOI: 10.24200/SCI.2022.55200.4111	2022
Enabling an anechoic U-Net based speech separation model for online and offline applications in reverberant conditions <i>Sania Gul Muhammad Salman Khan Ata ur-Rehman Syed Waqar Shah</i> <i>Applied Acoustics</i> , Volume 179, Article Number 108039 Impact Factor: 2.639 Quartile: 2 Citations: 1 DOI: 10.1016/j.apacoust.2021.108039	2021
On Fault-Tolerant Resolving Sets of Some Families of Ladder Networks <i>Hua Wang Muhammad Azeem Muhammad Faisal Nadeem Ata ur-Rehman Adnan Aslam</i> <i>Complexity</i> , Volume 2021, Article ID 9939559, 6 pages Impact Factor: 2.833 Quartile: 2 Citations: 8 DOI: 10.1155/2021/9939559	2021
A Degree Based Topological Study of Two Carbon Nanosheets VC5C7 and HC5C7. <i>Muhammad Ishtiaq Abdul Rauf Qammar Rubbab Muhammad Kamran Siddiqui Ata ur-Rehman Murat Cancan</i> <i>Polycyclic Aromatic Compounds</i> , Pages 1-21 Impact Factor: 3.744 Quartile: 2 Citations: 3 DOI: 10.1080/10406638.2021.1901125	2021
Enhanced visible light photocatalytic properties of Fe2O3-doped carbon nitride-based organo-catalysts <i>Muhammad Wasim Khan Sana Ullah Asif8 Fahim Ahmed Ata ur-Rehman A.R. Makhdoom Ehsan Ullah Khan</i> <i>Physica Scripta</i> , Volume 96, Article Number 055806 Impact Factor: 2.487 Quartile: 2 Citations: 4 DOI: 10.1088/1402-4896/abeba1	2021
Multi-Modal Anomaly Detection by Using Audio and Visual Cues <i>Ata-ur-Rehman Hafiz Sami Ullah Haroon Farooq Muhammad Salman Khan Tayyeb Mahmood Hafiz Owais Ahmed Khan</i> <i>IEEE Access</i> , Volume 9, Pages 30587-30603 Impact Factor: 3.367 Quartile: 2 Citations: 34 DOI: 10.1109/ACCESS.2021.3059519	2021
Anomaly Detection With Particle Filtering for Online Video Surveillance <i>Ata ur-Rehman Sameema Tariq Haroon Farooq Abdul Jaleel Syed Muhammad Wasif</i> <i>IEEE Access</i> , Volume 9, Pages 19457-19468 Impact Factor: 3.367 Quartile: 2 Citations: 35 DOI: 10.1109/ACCESS.2021.3054040	2021
Reducing Congestion in an Intelligent Traffic System With Collaborative and Adaptive Signaling on the Edge <i>Abdul Jaleel Muhammad Awais Hassan Tayyeb Mahmood Muhammad Usman Ghani Ata ur-Rehman</i> <i>IEEE Access</i> , Volume 8, Pages 205396-205410 Impact Factor: 3.367 Quartile: 2 Citations: 19 DOI: 10.1109/ACCESS.2020.3037348	2020
Classification of Degraded Traffic Signs Using Flexible Mixture Model and Transfer Learning <i>Abdul Mannan Kashif Javed Ata-ur-Rehman Haroon A. Babri Seroosh K Noon</i> <i>IEEE Access</i> , Volume 7, Pages 148800-148813 Impact Factor: 3.745 Quartile: 1 Citations: 16 DOI: 10.1109/ACCESS.2019.2947069	2019
Optimized segmentation and multiscale emphasized feature extraction for traffic sign detection and recognition <i>Abdul Mannan Kashif Javed Ata-ur-Rehman Seroosh K Noon Haroon A. Babri</i> <i>Journal of Intelligent and Fuzzy Systems</i> , Volume 36, No. 1, Pages 173-188 Impact Factor: 1.851 Quartile: 3 Citations: 7 DOI: 10.3233/JIFS-181082	2019

Multi-Target Tracking and Occlusion Handling With Learned Variational Bayesian Clusters and a Social Force Model <i>Ata-ur-Rehman Mohsen Naqvi L. Mihaylova Jonathon A. Chambers</i> <i>IEEE Transactions on Signal Processing</i> , Volume 64, No. 5, Pages 1320-1335 Impact Factor: 4.300 Quartile: 1 Citations: 54 DOI: 10.1109/TSP.2015.2504340	2016
Video-aided model-based source separation in real reverberant rooms <i>Muhammad Salman Khan Syed Mohsen Naqvi Ata ur-Rehman Wenwu Wang Jonathon Chambers</i> <i>IEEE/ACM Transactions on Audio Speech and Language Processing</i> , Volume 21, Issue 9, Pages 1900 -1912 Impact Factor: 2.625 Quartile: 2 Citations: 27 DOI: 10.1109/TASL.2013.2261814	2013
Conference Proceedings	
Mosquitoes Species Classification Using Acoustic Features of Wing Beats <i>Ata ur-Rehman Muhammad Bilal Saqlain Razzaq</i> <i>4th International Conference on Communication Technologies, ComTech 2023</i> , res.country(177,) Citations: N/A DOI: 10.1109/ComTech57708.2023.10165480	2023
On evaluation of dereverberation algorithms for expectation-maximization based binaural source separation in varying echoic conditions <i>Ata ur-Rehman Muhammad Sheryar Fulaly Sania Gul Muhammad Salman Khan Syed Waqar Shah</i> <i>2022 International Conference on Frontiers of Information Technology, FIT 2022</i> , res.country(177,) Citations: N/A DOI: 10.1109/FIT57066.2022.00045	2022
Design Considerations of Stand-Alone Solar Photovoltaic Systems <i>Waqas Ali Haroon Farooq Ata ur-Rehman Qasim Awais Mohsin Jamil Ali Noman</i> <i>2018 International Conference on Computing, Electronic and Electrical Engineering (ICE Cube)</i> , res.country(275,) Citations: N/A DOI: 10.1109/ICECUBE.2018.8610970	2018
Microcontroller and sensors based gesture vocalizer <i>Ata ur-Rehman Salman Afghani Muhammad Akmal Raheel Yousaf</i> <i>7th WSEAS International Conference on SIGNAL PROCESSING, ROBOTICS and AUTOMATION (ISPRA '08)</i> , res.country(231,) Citations: N/A DOI: Nil	2018
Modeling and performance analysis of micro-hydro generation controls considering power system stability <i>Waqas Ali Haroon Farooq Ata Ur Rehman Mohamed E. Farrag</i> <i>2017 First International Conference on Latest trends in Electrical Engineering and Computing Technologies (INTELLECT)</i> , res.country(177,) Citations: N/A DOI: 10.1109/INTELLECT.2017.8277626	2017
An algorithm for Morphological classification of motile human sperm <i>Ata Ur Rehman Lore E.M. Van Raemdonck Lyudmila Mihaylova Allan Pacey</i> <i>Sensor Data Fusion: Trends, Solutions, Applications (SDF), 2015</i> , res.country(57,) Citations: N/A DOI: 10.1109/SDF.2015.7347714	2015
Object Detection and Depth Estimation of Real World Objects using Single Camera <i>Sana Liaquat Umer Shahzad Ata Ur Rehman</i> <i>2015 Fourth International Conference on Aerospace Science and Engineering (ICASE)</i> , res.country(177,) Citations: N/A DOI: 10.1109/ICASE.2015.7489526	2015
Multi-target tracking by using particle filtering and a social force model <i>Ata Ur Rehman Syed Mohsen Naqvi Lyudmila Mihaylova Jonathon Chambers</i> <i>17th International Conference on Information Fusion (FUSION)</i> , res.country(68,) Citations: N/A DOI: 14650251	2014

Clustering and a joint probabilistic data association filter for dealing with occlusions in multi-target tracking <i>Ata Ur Rehman Syed Mohsen Naqvi Lyudmila Mihaylova Jonathon Chambers</i> <i>16th International Conference on Information Fusion, res.country(224,)</i> Citations: N/A DOI: 978-605-86311-1-3	2013
Variational Bayesian and belief propagation based data association for multi-target tracking <i>Ata Ur Rehman Syed Mohsen Naqvi Lyudmila Mihaylova Jonathon Chambers</i> <i>2013 IEEE International Conference on Acoustics, Speech and Signal Processing, res.country(38,)</i> Citations: N/A DOI: 10.1109/ICASSP.2013.6637954	2013
MCMC-PF Based Multiple Head Tracking in a Room Environment <i>Ata Ur Rehman Syed Mohsen Naqvi Raphael Phan Wenwu Wang Jonathon Chambers</i> <i>British Machine Vision Workshop, res.country(231,)</i> Citations: N/A DOI: http://dx.doi.org/10.5244/C.26	2012
Multispeaker direction of arrival tracking for multimodal source separation of moving sources <i>Ata Ur Rehman Syed Mohsen Naqvi Raphael Phan Jonathon Chambers</i> <i>Sensor Signal Processing for Defence (SSPD 2011) , res.country(231,)</i> Citations: N/A DOI: 10.1049/ic.2011.0143	2011