

Asim Dilawar Bakhshi

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About

Dr. Asim Dilawar Bakhshi is working as Defence Faculty in the Military College of Signals. Dr. Asim Dilawar Bakhshi has a PhD in Digital Signal Processing. Dr. Asim Dilawar Bakhshi has published 23 research articles & conference papers having a citation count of 210, carried out 1 projects and filed 0 intellectual property.

Qualifications

PhD in Digital Signal Processing	2007 - 2012
UET Lahore , Pakistan	
BE	1993 - 1996
F.Sc	1990 - 1992
Matric (SSC)	1987 - 1990

Experience

Defence Faculty	2022- Present
Military College of Signals	
Defence Faculty	2021 - 2022
Military College of Signals	
	- Present

Professional Memberships

PEC	Since 1996
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Research Projects

National Projects	
AI STP- Web Appl Security Evaluation and Health Informatics	2022
Funding Agency: Army	
Amount: PKR 15,060,000.00	
Status: Approved_inprocess	

International Projects

Research Articles

AI-CADS: An Artificial Intelligence based framework for automatic early detection and severity evaluation of coronary artery disease	2025
Muhammad Sajid Ali Hassan Dilshad Ahmed Khan Shoab Ahmed Khan Asim Dilawar Bakhshi Sayed Tanveer Abbas Gilani Muhammad Usman Akram Mustansar Ali Ghazanfar	
Biomedical Signal Processing and Control, Volume:106, Article Number: 107705, Pages:10	
Impact Factor: 4.9 Quartile: 1	
DOI: https://doi.org/10.1016/j.bspc.2025.107705	
MangiSpectra: A Multivariate Phenological Analysis Framework Leveraging UAV Imagery and LSTM for Tree Health and Yield Estimation in Mango Orchards	2025
Muhammad Munir Afsar Ejaz Hussain Javed Iqbal Muhammad Shahid Iqbal Asim Dilawar Bakhshi	

<p><i>Remote Sensing</i> , Volume 17(4), Article Number 703</p> <p>Impact Factor: 4.200 Quartile: 1 Citations: 1</p> <p>DOI: https://doi.org/10.3390/rs17040703</p>	
<p>AI-CADR: Artificial Intelligence Based Risk Stratification of Coronary Artery Disease using Novel Non-invasive Biomarkers</p> <p><i>Muhammad Sajid Ali Hassan Dilshad Ahmed Khan Shoaab Ahmed Khan Asim Dilawar Bakhshi Muhammad Usman Akram Mishal Babar Farhan Hussain Wadood Abdul</i></p> <p><i>IEEE Journal of Biomedical and Health Informatics</i> , Volume:28, Issue:12, Page(s):7543-7552</p> <p>Impact Factor: 6.700 Quartile: 1 Citations: 3</p> <p>DOI: https://doi.org/10.1109/JBHI.2024.3453911</p>	2024
<p>High-Precision Mango Orchard Mapping Using a Deep Learning Pipeline Leveraging Object Detection and Segmentation</p> <p><i>Asim Dilawar Bakhshi Muhammad Shahid Iqbal Ejaz Hussain Javed Iqbal Muhammad Munir Afsar</i></p> <p><i>Remote Sensing</i> , Volume 16(17), Article Number 3207</p> <p>Impact Factor: 4.200 Quartile: 1 Citations: 3</p> <p>DOI: https://doi.org/10.3390/rs16173207</p>	2024
<p>A deep learning-based framework for object recognition in ecological environments with dense focal loss and occlusion</p> <p><i>Muhammad Munir Afsar Asim Dilawar Bakhshi Ejaz Hussain Javed Iqbal</i></p> <p><i>Neural Computing and Applications</i> , Volume 36, Issue 16, Pages 9591-9604</p> <p>Impact Factor: 4.500 Quartile: 2 Citations: 2</p> <p>DOI: https://doi.org/10.1007/s00521-024-09582-5</p>	2024
<p>Medical image fusion using non subsampled contourlet transform and iterative joint filter</p> <p><i>Abdul ghafoor Asim Dilawar Bakhshi Nuwayrah Jawaid Saghir M Munawwar Iqbal Ch</i></p> <p><i>Multimedia Tools and Applications</i> , Pages 1-15</p> <p>Impact Factor: 2.577 Quartile: 2 Citations: 10</p> <p>DOI: https://doi.org/10.1007/s11042-021-11753-8</p>	2021
<p>IoTBoT-IDS: A novel statistical learning-enabled botnet detection framework for protecting networks of smart cities</p> <p><i>Asim Dilawar Bakhshi Javed Ashraf Marwa Keshk Nour Moustafa Mohamed Abdel-Basset Hasnat Khurshid Reham R. Mostafa</i></p> <p><i>Sustainable Cities and Society</i> , Volume 72, Article Number 103041</p> <p>Impact Factor: 10.696 Quartile: 1 Citations: 140</p> <p>DOI: doi.org/10.1016/j.scs.2021.103041</p>	2021
<p>Novel Deep Learning-Enabled LSTM Autoencoder Architecture for Discovering Anomalous Events From Intelligent Transportation Systems</p> <p><i>Asim Dilawar Bakhshi Javed Ashraf Nour Moustafa Hasnat Khurshid Abdullah Javed Amin Beheshti</i></p> <p><i>IEEE Transactions on Intelligent Transportation Systems</i> , Volume 22, No. 7, Pages 4507-4518</p> <p>Impact Factor: 9.551 Quartile: 1</p> <p>DOI: 1109/TITS.2020.3017882</p>	2021
<p>An Application of Peircean Triadic Logic: Modelling Vagueness</p> <p><i>Asim Dilawar Bakhshi Asim Raza Basit Koshul</i></p> <p><i>Journal of Logic, Language and Information</i> , Volume 28, Pages 389-426</p> <p>Impact Factor: 0.440 Quartile: 4</p> <p>DOI: 10.1007/s10849-019-09287-2</p>	2019
<p>Active contour-based clutter defiance scheme for correlation filters</p> <p><i>Ahmed Bilal Awan Asim Dilawar Bakhshi Muhammad Abbas Saad Rehman</i></p> <p><i>Electronics Letters</i> , Volume 55, Issue 9, Pages 525-527</p> <p>Impact Factor: 1.316 Quartile: 3 Citations: 4</p> <p>DOI: 10.1049/el.2018.7955</p>	2019
<p>Composite filtering strategy for improving distortion invariance in object recognition</p> <p><i>Asim Dilawar Bakhshi Ahmed Bilal Awan Saad Rehman</i></p> <p><i>IET Image Process</i> , Volume 12, Issue 8, Pages 1499–1509</p> <p>Impact Factor: 2.004 Quartile: 3 Citations: 8</p> <p>DOI: 10.1049/iet-ipr.2017.1147</p>	2018
<p>A template matched-filter based scheme for detection and estimation of t-wave alternans</p> <p><i>Sajid Bashir Asim Dilawar Bakhshi Mohammad Ali Maud</i></p>	2014

Biomedical Signal Processing and Control, Volume 13, Pages 247-261

Impact Factor: 1.419 | **Quartile:** 3 | **Citations:** 17

DOI: <https://doi.org/10.1016/j.bspc.2014.05.003>

Application of continuous-time wavelet entropy for detection of cardiac repolarisation alternans

2013

Asim Dilawar Bakhshi Sajid Bashir Asim Loan Muhammad Ali Maud

IET Signal Processing, Volume 7, Issue 8, Pages 783-790

Impact Factor: 0.691 | **Quartile:** 3 | **Citations:** 6

DOI: doi.org/10.1049/iet-spr.2012.0128

Non-linear trend estimation of cardiac repolarization using wavelet thresholding for improved T-wave alternans analysis

2013

Asim Dilawar Bakhshi S. Bashir S.I. Shah M.A. Maud

Digital Signal Processing, Volume 23, Issue 4, Pages 1197-1208

Impact Factor: 1.495 | **Quartile:** 2 | **Citations:** 7

DOI: [10.1016/j.dsp.2013.03.006](https://doi.org/10.1016/j.dsp.2013.03.006)

Performance evaluation of diverse T-wave alternans estimators under variety of noise characterizations and alternans distributions

2012

Asim Dilawar Bakhshi Sajid Bashir Imran Shafi Mohammad Ali Maud

Australasian Physical & Engineering Sciences in Medicine, Volume 35, Pages 439-454

Impact Factor: 0.885 | **Quartile:** 4 | **Citations:** 1

DOI: [10.1007/s13246-012-0170-0](https://doi.org/10.1007/s13246-012-0170-0)

An improved statistical representation for ECG electrode movement and muscular activity noises in the context of T-wave alternan estimation

2012

Asim Dilawar Bakhshi S. Bashir M.A. Maud

Biomedical Signal Processing and Control, Volume 8, Issue 3, Pages 297-301

Impact Factor: 1.074 | **Quartile:** 3 | **Citations:** 8

DOI: doi.org/10.1016/j.bspc.2012.11.004

Detection of ECG T-wave Alternans Using Maxima of Continuous-Time Wavelet Transform Ridges

2012

Asim Dilawar Bakhshi Abrar Ahmed Sardar Muhammad Gulfam Ali Khaqan Azhar Yasin Raja Ali Riaz Khurram Saleem Alimgeer Shahzad A. Malik Shahid A. Khan Aamir Hanif Dar

Przegląd Elektrotechniczny, Volume 88, No. 12b, Pages 35-38

Impact Factor: -

DOI: NA

Pattern synthesis optimization of 3-D ODAR based on improved GA using LSFE method

2011

Asim Dilawar Bakhshi Long Wei-jun Ben De Zhang Gong

Journal of Harbin Institute of Technology (New Series), Volume 18, No. 1, Pages 96-100

Impact Factor: -

DOI: [10.11916/j.issn.1005-9113.2011.01.018](https://doi.org/10.11916/j.issn.1005-9113.2011.01.018)

- Empirical mode decomposition for improved least square T-wave alternans estimation** 2018
Ehsan Ullah Asim Dilawar Bakhshi Muhammad Majid Sajid Bashir
2018 15th International Bhurban Conference on Applied Sciences and Technology (IBCAST), res.country(177,)
Citations: N/A
DOI: 10.1109/IBCAST.2018.8312245
- Empirical mode decomposition template matched filter for detection and estimation of T-wave alternans** 2016
Asim Dilawar Bakhshi Muhammad Latif Sajid Bashir Hafiz M. Ali
Computing in Cardiology Conference (CinC). IEEE, 2016, res.country(38,)
Citations: N/A
DOI: 2325-887X
- A Bayesian filtering application for T-wave alternans analysis** 2015
Azeem Irshad Asim Dilawar Bakhshi Sajid Bashir
2015 12th International Bhurban Conference on Applied Sciences and Technology (IBCAST), res.country(177,)
Citations: N/A
DOI: 10.1109/IBCAST.2015.7058508
- Aggregate spectrogram based classification of Holter ECG signals for wireless sensor networks** 2012
Asim Dilawar Bakhshi Mohammad Ali Maud Khalid Mehmood Aamir Asim Loan
2012 International Conference on Emerging Technologies, res.country(177,)
Citations: N/A
DOI: 10.1109/ICET.2012.6375455
- Cardiac arrhythmia detection using instantaneous frequency estimation of ECG signals** 2010
Asim Dilawar Bakhshi Muhammad Ali Maud Khalid Mehmood Aamir Asim Loan
2010 International Conference on Information and Emerging Technologies. IEEE, 2010, res.country(177,)
Citations: N/A
DOI: 10.1109/ICIET.2010.5625733