



# BUITEMS

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<b>Name:</b>	Dr. Raza Ali	
<b>Designation:</b>	Assistant Professor	
<b>Department:</b>	Electrical Engineering (Telecommunication)	
<b>Faculty:</b>	Information and Communication Technology	
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#### Qualifications:

Year	Degree/Certificate	Name of the Institute / University	Field of Study
2022	PhD	University of Malaya, Malaysia	Electrical Engineering
2015	MS	University of Engineering and Technology Lahore, Pakistan	Electrical Engineering (Communication)
2009	BS	Balochistan University Information Technology, Engineering and Management Sciences Quetta, Pakistan	Telecommunication Engineering

#### Selected Journal Publications:

Sr. No.	Title of Paper	Name of Journal	National/ International	Publication year
1	Fully Automatic Left Ventricle Segmentation Using Bilateral Lightweight Deep Neural Network	Life-MDPI	International	2023
2	Structural crack detection using deep convolutional neural networks	Automation in Construction	International	2022
3	Comparative studies of deep learning segmentation models for left ventricle segmentation	Frontiers in Public Health	International	2022

4	Crack Segmentation Network using Additive Attention Gate—CSN-II	Engineering Applications of Artificial Intelligence	International	2022
5	Automatic pixel-level crack segmentation in images using fully convolutional neural network based on residual blocks and pixel local weights	Engineering Applications of Artificial Intelligence	International	2021
6	A hybrid deep learning method for an hour ahead power output forecasting of three different photovoltaic systems	Applied Energy	International	2021
7	Retinal Vessel Segmentation Using Deep Learning: A Review	IEEE Access	International	2021
8	Movement aware smart street-lights for efficient energy utilisation: movement aware smart street-lights for efficient energy utilisation	Proceedings of the Pakistan Academy of Sciences: A. Physical and Computational Sciences	National	2021
9	Joint Hybrid Precoder and Combiner for Wideband Millimeter-Wave Massive MIMO Systems	IEEE Access	International	2020
10	5G-The Expectations and Enablers	Proceedings of the Pakistan Academy of Sciences: A. Physical and Computational Sciences	National	2018
11	A Non-Feistel Symmetric Key Encryption Algorithm	Bahria University Journal of Information & Communication Technologies (BUJICT)	National	2017
12	Keyless Averaging Encryption Algorithm	Journal of Applied and Emerging Sciences	National	2016
13	Analytical review of advanced optical modulation formats	Electrical and Electronics Engineering: An International Journal	International	2015
<b>Selected Papers Presented:</b>				
Sr. No.	Title of Paper	Name of Conference	National/ International	Year
1	Crack Segmentation Network using Tversky Loss Function with Variable Alpha and Beta	2022 IEEE Symposium on Industrial Electronics & Applications (ISIEA)	International	2022

2	Retinal vessel segmentation in fundus images using convolutional neural network	2021 International Conference on High Performance Big Data and Intelligent Systems (HPBD&IS)	International	2021
<b>Work Experience:</b>				
Sr. No.	From (Year)	To (Year)	Name of the Institution/ Organization	Position held
1	2016	Till Date	BUIITEMS, Quetta	Assistant Professor
2	2013	2016	BUIITEMS, Quetta	Lecturer
3				
<b>Area of specialization:</b>			Artificial Intelligence, Machine Learning, Deep Learning, Computer Vision, Signal Processing, Probability and Statistics, Image Processing.	
<b>Research Interests:</b>			Signal Processing, Computer Vision, Deep Learning	
<b>Research Profile:</b>			ORIC ID: <a href="https://orcid.org/0000-0003-0562-0682">https://orcid.org/0000-0003-0562-0682</a>	
			Google Scholar: <a href="https://scholar.google.com/citations?user=kZ5J3GkAAAAJ&amp;hl=en">https://scholar.google.com/citations?user=kZ5J3GkAAAAJ&amp;hl=en</a>	
<b>HEC Approved supervisor:</b>			HEC Approved PhD Supervisor	
<b>If Yes, provide HEC URL:</b>			<a href="https://www.hec.gov.pk/english/scholarshipsgrants/ASA/Pages/APS-EPORTAL.aspx">https://www.hec.gov.pk/english/scholarshipsgrants/ASA/Pages/APS-EPORTAL.aspx</a> (204996)	
<b>Research Grants/Projects:</b>			Principal Investigator (PI) Thermo Water Heating and Cooling system BUIITEMS ORIC Funded Project Duration: 1 Year (2016-2017) Cost: 0.1 million	
<b>Affiliations:</b>			IEEE: 92719373	
			PEC: TELE/1643	
<b>Other Responsibilities:</b>			<ul style="list-style-type: none"> <li>• FICT Timetable Coordinator (2022 – till date)</li> <li>• Departmental OBE Coordinator (2023 – till date)</li> <li>• Branch Counselor IEEE BUIITEMS, Student Branch (2022 – till date)</li> <li>• Focal Person (TE) (2022 – till date)</li> <li>• Supervising BS FYPs and MS Research Students</li> <li>• Class counsellor (2022 – 2023)</li> </ul>	
<b>Events Organized/Activities:</b>			<ul style="list-style-type: none"> <li>• Member of the Organizing Committee for 2<sup>nd</sup> PEC Engineering Capstone Expo Balochistan (6 December 2022)</li> <li>• Reviewer of IEEE Symposium on Industrial Electronics &amp; Applications (17-18 July 2020)</li> <li>• Publicity &amp; Public Relationship Committee Member IEEE-ICE-Cube 2018</li> <li>• Organizing Committee Member of Quetta Literary Festival (QLF 18)</li> <li>• Member of Steering Committee IEEE ICE-Cube 2016</li> </ul>	

**Bio:**

Dr. Raza Ali received a Ph.D. degree from the University of Malaya, Malaysia, in 2022. During his Ph.D. he was associated with the VIP Laboratory at the University of Malaya, Malaysia. Dr. Ali received MS degree in Electrical Engineering (Communication) from UET, Lahore, and BS degree in Telecommunication Engineering from BUITEMS, Quetta. His research interests include signal processing, computer vision, machine learning, and deep learning. Currently, he works as an Assistant Professor with the Faculty of Information and Communication Technology, BUITEMS, Quetta Pakistan.