

Anum Abdul Salam

Senior Lecturer

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About

Dr. Anum Abdul Salam is working as Senior Lecturer in the College of Electrical & Mechanical Engineering. Dr. Anum Abdul Salam has published 32 research articles & conference papers having a citation count of 144, carried out 0 projects and filed 4 intellectual property.

Qualifications

MS in Signal And Image Processing UET Taxila , Pakistan	2013 - 2016
BS in Computer Engineering UET Taxila , Pakistan	2008 - 2012

Experience

Senior Lecturer College of Electrical & Mechanical Engineering	2025- Present
Lecturer College of Electrical & Mechanical Engineering	2016 - 2016

Awards

Gold Medal Awarded by Chancellor of University of Engineering and Technology Taxila for best academic performance in BSc in Computer Engineering	2012
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Professional Memberships

PEC

Research Articles

Skin whole slide image segmentation using lightweight-pruned transformer <i>Anum Abdul Salam Muhammad Zeeshan Asaf Muhammad Usman Akram Ammad Ali Mashaal Ibne Masha Allah Babar Rao Samavia Khan Bssem Rafiq Bianca Sanabria Muhammad Haroon Yousaf Biomedical Signal Processing and Control , Volume:106, Article Number 107624</i> Impact Factor: 4.900 Quartile: 1 DOI: https://doi.org/10.1016/j.bspc.2025.107624	2025
Class and Data-Incremental Learning Framework for Baggage Threat Segmentation via Knowledge Distillation <i>Ammara Nasim Saad Mazher Khan Anum Abdul Salam Adeel M Syed Muhammad Usman Akram Arsalan Shaukat Taimur Hassan IEEE Access , Volume:13, Pages 95977-96000</i> Impact Factor: 3.600 Quartile: 2 DOI: 10.1109/ACCESS.2025.3574919	2025
DermaTransNet: Where Transformer Attention Meets U-Net for Skin Image Segmentation <i>Anum Abdul Salam Muhammad Usman Akram Haroon Yousaf Babar Rao IEEE Access , Volume:13, Page(s):64305-64329</i> Impact Factor: 3.4 Quartile: 2 DOI: 10.1109/ACCESS.2025.3556889	2025
Two-dimensional hybrid incremental learning (2DHIL) framework for semantic segmentation of skin tissues	2024

<p><i>Muhammad Imran Muhammad Usman Akram Mohsin Islam Tiwana Anum Abdul Salam Danilo Greco</i> <i>Image and Vision Computing</i> , Volume 148, Article Number: 105098</p> <p>Impact Factor: 4.7 Quartile: 1 Citations: 2 DOI: 10.1016/j.imavis.2024.105098</p>	
<p>Proliferative Diabetic Retinopathy Diagnosis Using Varying-Scales Filter Banks and Double-Layered Thresholding</p> <p><i>Anum Abdul Salam Jahan Zeb Muhammad Usman Akram Norah Saleh Alghamdi Noor ul Huda</i> <i>Diagnostics</i> , Volume 13, Issue 13, Article Number 2231</p> <p>Impact Factor: 3.6 Quartile: 2 DOI: https://doi.org/10.3390/diagnostics13132231</p>	2023
<p>A Deep Learning Based Approach for Grading of Diabetic Retinopathy Using Large Fundus Image Dataset</p> <p><i>Ayesha Mehboob Muhammad Usman Akram Norah Saleh Alghamdi Anum Abdul Salam</i> <i>Diagnostics</i> , Volume 12, Issue 12, Article Number 3084</p> <p>Impact Factor: 3.992 Quartile: 2 Citations: 22 DOI: https://doi.org/10.3390/diagnostics12123084</p>	2022
<p>RIDB: A Dataset of fundus images for retina based person identification</p> <p><i>Muhammad Usman Akram Anum Abdul Salam Sajid Gul Khwaja Shoab Ahmed Khan Gul Hassan Naqvi</i> <i>Data in Brief</i> , Volume 33, Article Number 106433</p> <p>Impact Factor: 0 Citations: 15 DOI: https://doi.org/10.1016/j.dib.2020.106433</p>	2020
<p>Optic Disc Localization using Local Vessel Based Features and Support Vector Machine</p> <p><i>Muhammad Usman Akram Anum Abdul Salam</i> <i>Journal of Network and Innovative Computing</i> , Volume 4, Pages 046-054</p> <p>Impact Factor: 0 DOI: -</p>	2016
<p>Automated Detection of Glaucoma using Structural and Non Structural Features</p> <p><i>Anum Abdul Salam Tehmina Khalil M. Usman Akram Amina Jameel Imran Basit</i> <i>SpringerPlus</i> , Volume: 5 Article Number: 1519</p> <p>Impact Factor: 1.130 Quartile: 2 Citations: 104 DOI: 10.1186/s40064-016-3175-4</p>	2016
<p>Improved automated detection of glaucoma from fundus image using hybrid features</p> <p><i>Muhammad Usman Akram Anum Abdul Salam Shfaat A. Bazaz Syed Muhammad Anwar Kamran Wazir Imran Basit</i> <i>Al-Shifa Journal of Ophthalmology</i> , Vol.11(2), Pages 103-115</p> <p>Impact Factor: N/A</p>	2015
<h2>Conference Proceedings</h2>	
<p>A Deep Learning-based Framework for OCT Image Generation, Segmentation and Analysis</p> <p><i>Anum Abdul Salam Mudassar Khan Farheen Fatima Tehreem Javed Muhammad Hashir Malik Muhammad Usman Akram</i> 2024 17th International Conference on Machine Vision (ICMV 2024), res.country(231,)</p> <p>Citations: N/A DOI: Nil</p>	2024
<p>TRANSFORMER-BASED SKIN CARCINOMA CLASSIFICATION USING HISTOPATHOLOGY IMAGES VIA INCREMENTAL LEARNING</p> <p><i>Muhammad Imran Muhammad Usman Akram Anum Abdul Salam</i> 14th International Conference on Pattern Recognition Systems (ICPRS), res.country(231,)</p> <p>Citations: N/A DOI: https://doi.org/10.1109/ICPRS62101.2024.10677812</p>	2024
<p>Dilated Convolution and Residual Network based Convolutional Neural Network for Recognition of Disastrous Events</p> <p><i>Dania Shafique Muhammad Usman Akram Taimur Hassan Tahira Anwar Anum Abdul Salam</i> 2022 IEEE International Symposium on Robotic and Sensors Environments (ROSE), res.country(2,)</p> <p>Citations: N/A DOI: 10.1109/ROSE56499.2022.9977424</p>	2022
<p>An enhanced agile-V model for system engineering in complex medical device development</p>	2022

<p><i>Aliya Ashraf Muhammad Usman Akram Anum Abdul Salam Wasi Haider Butt</i> 2022 2nd International Conference on Digital Futures and Transformative Technologies (ICoDT2), res.country(177,)</p> <p>Citations: N/A DOI: 10.1109/ICoDT255437.2022.9787446</p>	
<p>Image Popularity Prediction Over Time For the Span Of 30 Days Using Machine learning Techniques <i>Amna Shahid Muhammad Usman Akram Anum Abdul Salam Jahan Zeb</i> 2022 2nd International Conference on Digital Futures and Transformative Technologies (ICoDT2), res.country(177,)</p> <p>Citations: N/A DOI: 10.1109/ICoDT255437.2022.9787438</p>	2022
<p>Deep Framework for Predicting COVID-19 and Related Lung diseases using CXR Images <i>Wajeeha Fareed Muhammad Usman Akram Anum Abdul Salam Maria Alam</i> 2022 2nd International Conference on Digital Futures and Transformative Technologies (ICoDT2), res.country(283,)</p> <p>Citations: N/A DOI: 10.1109/ICoDT255437.2022.9787453</p>	2022
<p>Automatic Detection and classification of Correct placement of tubes on chest X-rays using deep learning with EfficientNet <i>Moneeb Abbas Anum Abdul Salam Jahan Zeb</i> 2022 2nd International Conference on Digital Futures and Transformative Technologies (ICoDT2), res.country(283,)</p> <p>Citations: N/A DOI: 10.1109/ICoDT255437.2022.9787435</p>	2022
<p>A Survey On Prevalent Approaches To Predict The Popularity Of Social Content <i>Amna Shahid Muhammad Usman Akram Anum Abdul Salam Jahan Zeb</i> 2022 2nd International Conference on Digital Futures and Transformative Technologies (ICoDT2), res.country(177,)</p> <p>Citations: N/A DOI: 10.1109/ICoDT255437.2022.9787430</p>	2022
<p>Automatic Detection and classification of Scoliosis from Spine X-rays using Transfer Learning <i>Arslan Ameen Moneeb Abbas Anum Abdul Salam</i> 2022 2nd International Conference on Digital Futures and Transformative Technologies (ICoDT2), res.country(177,)</p> <p>Citations: N/A DOI: 10.1109/ICoDT255437.2022.9787480</p>	2022
<p>Osteo-Doc: KI-Grading of Osteoarthritis using Deep-Learning <i>Haider Masood Eisha Hassan Anum Abdul Salam Muwahida Liaquat</i> 2022 2nd International Conference on Digital Futures and Transformative Technologies (ICoDT2), res.country(177,)</p> <p>Citations: N/A DOI: 10.1109/ICoDT255437.2022.9787470</p>	2022
<p>VGG-UNET for Brain Tumor Segmentation and Ensemble Model for Survival Prediction <i>Ali Nawaz Muhammad Usman Akram Amad Rizwan Ali Attique Ur Rehman Anum Abdul Salam Jahan Zeb</i> International Conference on Robotics and Artificial Intelligence (ICRAI), res.country(275,)</p> <p>Citations: N/A DOI: 10.1109/ICRAI54018.2021.9651367</p>	2021
<p>Cassava Leaf Disease Classification using Deep Neural Networks <i>Alina Maryum Muhammad Usman Akram Anum Abdul Salam</i> IEEE 18th International Conference on Smart Communities: Improving Quality of Life Using ICT, IoT and AI (HONET) res.country(177,)</p> <p>Citations: N/A DOI: 10.1109/HONET53078.2021.9615488</p>	2021
<p>Automated Inner Limiting Membrane Segmentation in OCT Retinal Images for Glaucoma Detection <i>Aneeqa Ramzan Muhammad Usman Akram Javeria Ramzan Qurat-ul-Ain Mubarak Anum Abdul Salam Ubaid Ullah Yasin</i> Science and Information Conference 2018 , res.country(231,)</p> <p>Citations: N/A DOI: 10.1007/978-3-030-01177-2_93</p>	2018
<p>Benchmark Data Set For Glaucoma Detection With Annotated Cup To Disc Ratio <i>Anum Abdul Salam M.Usman Akram Haroon Javed Amna Arouj Imran Basit Tariq Shaqur Sheeraz Kamran Wazir</i> 2017 International Conference on Signals and Systems (ICSigSys), res.country(100,)</p> <p>Citations: N/A DOI: 10.1109/ICSIGSYS.2017.7967046</p>	2017

Comparison of different de-noising techniques for removal of poison noise from cervical X-Rays images. <i>Muhammad Adeel Asim Muhammad Usman Akram Anum Abdul Salam</i> <i>Communication, Computing and Digital Systems (C-CODE)</i> , res.country(177,) Citations: N/A DOI: 10.1109/C-CODE.2017.7918943	2017
Comparison of different de-noising techniques for removal of poison noise from cervical X-Rays images <i>Muhammad Adeel Asim Muhammad Usman Akram Anum Abdul Salam</i> <i>2017 International Conference on Communication, Computing and Digital Systems (C-CODE)</i> , res.country(177,) Citations: N/A DOI: 10.1109/C-CODE.2017.7918943	2017
Autonomous Glaucoma detection from fundus image using cup to disc ratio and hybrid features <i>Anum Abdul Salam Muhammad Usman Akram Kamran Wazir Syed Muhammad Anwar Muhammad Majid</i> <i>2015 IEEE International Symposium on Signal Processing and Information Technology (ISSPIT)</i> , res.country(2,) Citations: N/A DOI: 10.1109/ISSPIT.2015.7394362	2015
Optic Disc Localization using Local Vessel Based Features and Support Vector Machine <i>Anum Abdul Salam Muhammad Usman Akram Sarmad Abbas Syed M. Anwar</i> <i>2015 IEEE 15th International Conference on Bioinformatics and Bioengineering (BIBE)</i> , res.country(189,) Citations: N/A DOI: 10.1109/BIBE.2015.7367701	2015
A Review Analysis on Early Glaucoma Detection using Structural Features <i>Anum Abdul Salam M. Usman Akram Kamran Wazir Syed Muhammad Anwar</i> <i>2015 IEEE International Conference on Imaging Systems and Techniques (IST)</i> , res.country(48,) Citations: N/A DOI: 10.1109/IST.2015.7294516	2015
Importance of vendor and manufacturer relationship for effective lean practices. <i>Muhammad Rafid Mahmood Usama Bin Perwez Aamer Ahmed Baqai Anum Abdul Salam</i> <i>IEEE 3rd International Design Management Symposium</i> , res.country(48,) Citations: N/A DOI: 10.1109/TIDMS.2013.6981240	2013

Editorial Activities

Reviewed Papers for Journals Impact Factor: 3	2024
Multimedia Tools and Applications Reviewed Papers for Journals Impact Factor: 3.0	2024
Multimedia Tools and Applications Reviewed Papers for Journals Impact Factor: 3	2024
Multimedia Tools and Applications Reviewed Papers for Journals Impact Factor: 3.6	2024
Journal of Imaging Informatics in Medicine Reviewed Papers for Journals Impact Factor: 4.4	2024

Intellectual Property

Copyrights

Web Based tool for OCT Image Generation, Segmentation and Classification	2024
Status: Filed	
Gennotate:A python-based computer program that generates Optical Coherence Tomography images, helps in automatic annotation followed by retinal disease classification.	2024
Status: Filed	
Deep Learning Based PAS Stained Slide Analysis and Noninvasive Confocal Image Staining	2024
Status: Filed	
Osteodoc an AI based Application for Osteoarthritis	2022
Status: Filed	

Patents

Industrial Designs

Trademarks