



(Monauwer Alam)

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PROFILE

Profile Summary:

- **Monauwer Alam** has been working as Associate Professor since March, 2015. He served as HoD of the Department of Electronics & Communication Engg. from Nov.2009 to Dec.2010 and HoD of Electrical Engg. Department from April 2016 to August 2023. He has joined the Electronics Engineering department as a Lecturer in October 2001. He obtained his PhD degree in Electronics and Communication Engineering in the area of development of new image compression algorithm for Transmission of Images over heterogeneous network from the Integral University, India in 2014. He has published 27 papers in refereed journals and conferences. He has supervised 3 PhDs and currently supervising three more along with many Master level dissertations. He has delivered several keynotes addresses and invited talks in conferences and Workshops. He has published a patent in "Erroneous energy reading detector for smart energy meter".

RESEARCH INTEREST:

- Image processing
- Pattern recognition
- Antenna designing for MIMO applications.

SUMMARY OF RESEARCH ACCOMPLISHMENT:

- **Number of Publications in SCI indexed Journals:** 03
- **Number of Publications in Scopus indexed Journals:** 08
- **Number of Publications in Non- SCI/Scopus but Peer Reviewed Journals:** 10
- **Number of Publications in international Conferences:** 06
- **Number of Patent Published:** 01
- **Number of Book Chapters:** 03
- **Number of Book Edited:** 01
- **Number of Book author:** 01
- **Citations:** 57
- **Presentation in International conference:** 04
- **Invited talk as a Resource Person:** 16

PROFESSIONAL MEMBERSHIP:

- Member of IEEE
- Life Member of Solar Energy Society of India (SESI).

COURSE TAUGHT:

- **UG:**
- Digital Signal Processing
- Digital Image Processing
- Optical Communication
- Signals & Systems
- Microwave Engg.
- Network & system
- Biomedical Electronics
- Measurement & Instrumentation
- Antenna & Wave Propagation
- Electromagnetic Field Theory
- Microprocessor & its application
- Wireless Communication
- Basics Electronics
- Electronics Devices & Circuits.
- Satellite & Radar
- Digital Communication
- Analog communication
- Digital Electronics

PG:

- Advance Digital Signal Processing
- Pattern Recognition
- Semiconductor Device Modelling & Circuit Simulation

ADMINISTRATIVE/DEPARTMENTAL RESPONSIBILITY:

- Head Department of Electrical Engg: April 2016-August2023
- Head Department of ECE: Nov.2009- Dec. 2010
- PG coordinator in Electrical Engg. since 2023
- Designed many subject's syllabus of U.G and PG for ECE dept. for I.U, Lucknow.
- Designed many experiments for Microwave Lab, Optical Communication Lab, Telemetry Lab, D.S.P & Digital Communication Lab for UG/PG courses.
- Question Paper Setter & Moderator of many subjects of U. G, P. G & Ph. D.
- Organizing **secretary** of national conference ETNCER-16 organized at Integral University, Lucknow, 27th Oct. 16.
- **Convener** of International seminar PSFPRES-17 organized at Integral University, Lucknow on 21st Jan. 17
- **Convener** International seminar Modern trends in engineering and sciences (MTES-17) organized at Integral University, Lucknow on 3rd Aug.2017.

- **Convener** of IEEE International conference CCTES-18 organized at Integral University, Lucknow, 14th -15th Sep. 2018.
- **Convener** of PDP on “Recent trend in green technology for attainment of UN sustainable development Goal 2030, organized by dept. of EE, Integral University, Lucknow, 2nd -22nd July 2022.
- **Convener** of 6 weeks (30 hrs.) Value Added course on “Electric Vehicle Technology :”, organized by dept. of EE, Integral University, Lucknow, 6th Sep. -20th Oct. 2022.
- **Convener** of 6 weeks (30 hrs.) Value Added course on “Electric Vehicle: Technology of the present and future”, organized by dept. of EE, Integral University, Lucknow, 22nd Nov. -31st Dec. 2021.
- Internal Expert of Research and Development Committee of Computer Application dept. of Integral University in the session 2018-19.
- Internal Expert of Research and Development Committee of Electronics & Communication Engg. dept. of Integral University in the session 2018-19.
- Design and conducted Value added course on IOT (Networking using CISCO PACKET TRACER) in the academic session 2022-23 and 23-24
- Design and conducted Value added course on IOT (Networking using CISCO PACKET TRACER) in the academic session 2021-22.
- Design and conducted Value added course IOT (Home automation using CISCO PACKET TRACER) in the academic session 2020-21.
- Member of University Proctorial Committee from 2004 to 2007
- External observer to conduct I. U. Entrance Test (Science College, Patna 2008, Islamia degree college, Lucknow 2009).
- Assistance centre Superintendent in examinations conducted in the Integral University Campus since 2016
- Member of Integral University IQAC Criteria -2(NAAC) Since 2022
- Departmental Incharge for NAAC Criteria-3 Since Oct. 2023
- Actively involved in AICTE, UGC, NBA (2013) and NAAC (2015) visit preparations of the ECE department.
- Member TEQIP-I (World Bank-2006) Integral University, Lucknow.

STUDENTS SUPERVISION

- Ph.D.: 03 (Completed) 03(On going)
- M.Tech: 07
- B.Tech : 18

PUBLISHED/GRANT PATENTS

- ERRONEOUS ENERGY READING DETECTOR FOR SMART ENERGY METER, Application No.202311073506 A. Published in 2023.

PUBLISHED/ACCEPTED SCI/SCOPUS RESEARCH PAPERS

- Vivek Kumar Gupta, **Monauwer Alam**, 2024"Design of Triple-Band Two-Port DR-Based MIMO Antenna with Circularly Polarization for Wireless Application," SSRG International Journal of Electrical and Electronics Engineering, (Scopus) vol. 11, no. 4, pp. 1-7,
- Vivek Kumar Gupta, **Monauwer Alam**, Abhimanyu Yadav, Anand Sharma,2023, “ Two-port dielectric resonator antenna loaded with meta-surface for improving isolation and circular polarization generator”, International Journal of Communication System,(**SCI**)44(7):pp.1-13.

- H. Chandra, S. Bajpai, **Monauwer Alam**, V. S. Chandel, A. K. Pandey, D. Pandey , 2023, 3D-Memory efficient listless set partitioning in hierarchical trees for hyperspectral image sensors. Journal of Intelligent & Fuzzy Systems (**SCI**). 46(6) : pp.11163-11187.
- Shrish Bajpai, Divya Sharma, **Monauwer Alam**, Vishal Singh Chandel, Amit Kumar Pandey, Suman Lata Tripathi, Feb.2023 “Curvelet Transform Based Compression Algorithm for Low Resource Hyperspectral Image Sensors,’ Journal of Electrical and Computer Engineering (SCI). Vol.2023, pp.1-18.
- D.Hussain, **Monauwer Alam**, “NSCT based PCA and K-means clustering block level approach for SAR image denoising”, Journal of Theoretical and Applied Information Technology (Scopus), Vol.100, pp.5650-5659, Sep. 2022.
- Dawar Husain, Upendra kumar, **Monauwer Alam**, “Implementation Of Spatial-Scale Domain Based De-Noiseing Techniques using Different Thresholding”,International Journal of Innovative Technology and Exploring Engineering (IJITEE) (Scopus), Vol.9,pp.3594-3603, 2020.
- NishatBano, **Monauwer Alam**, Shish Ahmad, “Energy-Efficient,low memory listless SPIHT coder for wireless multimedia sensor networks,” Advances in Wireless and Mobile Communications(Scopus). Vol. 10, pp. 871-883, 2017.

PAPER PUBLISHED IN INTERNATIONAL CONFERENCES:

- Vivek Kumar Gupta, **Monauwer Alam**, Abhimanyu Yadav, Anand Sharma (2024) “Design and evaluation of a Dual sense and Dual-band Circularly Polarized Dielectric Resonator Antenna for IOT Application”, Published in: 2024 IEEE International Conference on Interdisciplinary Approaches in Technology and Management for Social Innovation (IATMSI)
- S. Hasnain, S. Bakhahi, S. Asif, **Monauwer Alam**, “Analysis of Image Coders”, in the Proceedings of National Conference ETNCER-16, pp. 210-215.
- S. Srivastava, I.U.Khan, S. H.Saeed, **Monauwer Alam**,“ Review of renewable energy for rural development and impact of solar energy in rural development in India”, in the proceedings of National Conference ETNCER-16, pp. 13-18.
- Farha, **Monauwer Alam**, N. R. Kidwai, (2014), Analysis of SPIHT and its Low Memory Version, National Conference On “Advance Research and Innovation in Science & Engineering” (ARISE-14), M. U., Moradabad, pp 24-29, ISBN 978-93-5174-106-0
- D. Husain, A.K Trivedi, N. R Kidwai, **Monauwer Alam** (2014), Design of hearing aid using Halfband filter, National conference on challenges and opportunities for technological innovation in India COTII-2014, Ambalika Institute of Technology & Management, Lucknow, India.
- **Monauwer Alam**, N.R. Kidwai, Bal Gopal (2010), Image De-noising using integer wavelet multilevel decomposition, In First International conference on emerging trends in signal processing & VLSI, June 2010, GNEC Hyderabad, India, supported by IEEE.

PUBLISHED NON-SCI-SCOPUS BUT PEER REVIEWED RESEARCH PAPERS

- Dawar Husain, Upendra kumar, **Monauwer Alam**, “Image de-noising using multi scale transform based technique,”International Journal of Eng. Sciences and Research technology,Vol.5,pp.31-37,Aug.2015. pp.28-34, August 2017.
- NishatBano, **Monauwer Alam**, Shish Ahmad, “Resilient, Energy Efficient Image Sensor Network in Lossy Channel”, International Journal of Innovative Research in Science,

- Engineering and Technology (Scopus), Vol 6, Issue 6, pp.11043-11049, June 2017.
- Faizan A.Khan, **Monauwer Alam**, S. H. Saeed, V. S. Chandel, N. R. Kidwai, “Hybrid Electricity generation from solar P.V, Speed breaker and traffic sound for automatic street light”, International journal advances in physical science research ,pISSN:2321-9742, Vol.8,No.2,pp.32-41,2016
 - Amsal Subhan, **Monauwer Alam** “Understanding the Behavior of Band-Pass Filter with Windows for Speech Signal”, International Journal of Modern Engineering Research (IJMER) Vol.5, pp.31-37, Aug.2015.
 - Sandeep Kumar, **Monauwer Alam** “BMP/GIF/JPEG image implementation through FPGA monitor using VHDL”, International Journal of research and development in applied science and engg. Vol.1, Issue 1,2015.
 - V. Kumari, N. R. Kidwai, **Monauwer Alam**, “Low complexity viterbi decoder by using trellis structure”, International Journal of Electronics, Communication & Instrumentation Engineering Research and Development (IJEICERD), Vol.1, pp.37-50, 2015.
 - R. Mishra, **Monauwer Alam**,“Development and Performance Evaluation of Efficient Low-complexity SPIHT Image Coder”, International Journal of Research and Development in Applied Science and Engineering (IJRDASE), Vol.2,pp.10 -14 , Sep. 2015.
 - Shobhraj, N. R. Kidwai, **Monauwer Alam**, “Fingerprint recognition system”, International Journal of innovative science, engineering & technology, Vol.1, pp.504 -512 , May. 2014
 - Md. Asif Ali, N. R. Kidwai, **Monauwer Alam**, “Face recognition system for mobile phone”, International Journal of innovative science, engineering & technology, Vol.1,pp.500 -503, May.2014
 - Khan Huma Aftab, **Monauwer Alam**,” Design of VGA Controller using VHDL for LCD Display using FPGA”, International Journal of Modern Engg. Research, Vol.4, pp.43-49, 2014.
 - Mohd.Javed Khan, Asok Bhattacharyya , **Monauwer Alam**, “Design issues and challenges of reliable and secure transmission of medical images,”International Journal of Research in Engineering and Technology, Vol.3, pp.156-158 ,2014.
 - Naimur Rahman Kidwai, **Monauwer Alam** , Ekram Khan and Rizwan Beg, “A Efficient Memory No List Set Partitioned Embedded Block (NLSK) Wavelet Image Coding Algorithm for Low Memory Devices”, International Journal of Signal Processing, Image Processing and Pattern Recognition, Vol.5, pp.93-106,Dec.2012
 - **Monauwer Alam**, Ekram Khan and Bal Gopal, “Modified listless Set Partitioning in Hierarchical Trees (MLS) coding for memory constrained image coding applications,” International journal of current trend in signal processing (STM Journal), Vol.2, pp.56-66, Aug.2012.
 - **Monauwer Alam**, Ekram Khan, “Listless highly scalable set partitioning in hierarchical trees coding for transmission of image over heterogeneous networks,” International journal of computer networking, wireless and mobile communication, Vol.2, pp.36-48(2012).

BOOK EDITED/ AUTHOR:

- Title: Energy trends in non-conventional energy resources, (2021), Aargoan Press, India, **Monauwer Alam** & Imranullah Khan.
- Title: Image transmission and heterogeneous networks (2021), Aargoan Press,India, **Monauwer Alam** & Ekram Khan, ISBN:978-81-95188-45-1

PUBLISHED BOOK CHAPTERS:

- Mohiuddin K Ghouse, **Monauwer Alam**, N R Kidwai, S. N. Tiwari_“Simulation study of small signal common source amplifier using series and parallel networks of like fetes through PSPICE Book title: Emerging Trends in IoT and Computing Technologies, ISBN:9781003350057,2023.

- Nishat Bano, **Monauwer Alam**, Shish Ahmad, “Energy efficient image compression techniques in WSN”, Book title: Intelligent communication, control and devices, Springer, Singapore, Vol.624, pp.1079-1088,2018, ISBN: 978-981-10-5903-2.

- Nishat Bano, **Monauwer Alam**, Shish Ahmad, “Performance evaluation of wavelet-based Image compression techniques”, Book title: Intelligent communication, control and devices, Springer, Singapore, Vol.624, pp 769-777, 2018, ISBN: 978-981-10-5903-2.

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