

Curriculum Vitae
SHABIR AHMAD PARAH

Department: PG Department of Electronics
& Instrumentation Technology University of Kashmir,
Hazratbal, Srinagar, 190006, J&K, India

Present Designation: Sr. Assistant Professor

Date of Appointment: 05-05-2010

Date of Birth: 27-03-1980

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G. Scholar link:
<https://scholar.google.co.in/citations?user=to9MUZAAAAAJ&hl=en>

Research-gate link: https://www.researchgate.net/profile/Shabir_Parah

URL: <http://electronics.uok.edu.in/Shabir.aspx>

Citations, h-Index, i-10 Index & Summary of Research Activities (as on 31-05-2021)

Total Citations	1640	No of Journal Papers	76
H Index	23	No. of Conf. Papers	49
i-10 Index	41	No of Seminar papers	67
Cumulative Impact Factor (JCR)	175	Patents filed	01
No of Books	01	No of book Chapters	24

Research Guidance/Project guidance

Status	Ph. D.	M. Phil	M.Tech	M.Sc.	B.Tech.
Awarded	5	3	17	40	20
Submitted	1	0	0	0	0
Ongoing	7	0	8	5	0

Research grants mobilized during last five years = 121 Lacs

Funding agencies: DST, DSIR, and UGC Government of India

Awards Received: 05

Rare Distinctions: Figured in **World top 2% Researchers** in the Field of Image Processing and Artificial Intelligence for year 2019-2020

RESEARCH INTERESTS

Multimedia Authentication and security, Image Processing, Electronic Healthcare, Secure communications, Steganography and Digital Watermarking, Nature Inspired Computing, Spintronics

EDUCATIONAL DETAILS

Ph. D. Electronics (Data hiding and Watermarking) Thesis: Design and Development of Efficient and Reliable Image Processing techniques	University of Kashmir: Sept, 2013 Supervisor: (Prof. G. M. Bhat)
M. Phil. Electronics (Digital Signal Processing) Dissertation: Design, Development and Implementation of Signal Processing algorithms using Embedded Technology	University of Kashmir: June, 2010 Supervisor: (Prof. G. M. Bhat)
M. Sc. Electronics Project: Design and Development of DTMF remote control system for home appliance control.	University of Kashmir: Sep, 2004 Supervisor: (Prof. G. M. Bhat)
B. Ed	University of Kashmir: Sep, 2008
B. Sc. Non-Medical (Electronics)	University of Kashmir: March, 2001

Achievements

Junior Research Fellow,(JRF) (Electronic Sciences)	<i>University Grants Commission, June 2008</i>
National Eligibility Test (NET) for Lectureship (Electronic Sciences)	<i>University Grants Commission, June 2008</i>
State Eligibility Test (SET) (Electronic Sciences)	<i>University Grants Commission and Jammu University March 2008</i>
GATE : (Electronics and Communication Engineering)	<i>IIT Delhi and MHRD Government of India April, 2008</i>
Topper (Rank 1st)	<i>M. Sc. Electronics Entrance Test-2002, KU.</i>
Topper (Rank 1st)	<i>M.Phil. Electronics Entrance Test-2008, KU.</i>
Topper (Rank 2nd)	<i>M. Sc. Electronics degree Examinations 2004, KU.</i>
EKT.	<i>Indian Air Force, for Aeronautical engineering , April 2006</i>

Experience (Teaching and Research)

Positions held	Organization
Sr. Assistant Professor	Department of Electronics and Instrumentation Technology University of Kashmir Srinagar, India <i>5th May 2014-Present</i>
Assistant Professor	Department of Electronics and Instrumentation Technology University of Kashmir Srinagar, India <i>5th May 2010- 4th May 2014</i>
Junior Research Fellow(JRF)	University Grants Commission New Delhi, India 12 Jan-2009 to 4 th May 2010
Cont. Assistant Professor	Department of Electronics and Instrumentation Technology University of Kashmir Srinagar, India <i>14 June-2008 to 11 Jan -2009</i>
Teacher	School Education, Govt. Of Jammu and Kashmir Oct- 2005 to June 2008

AWARDS/MEDALS

- Received **Best Algorithmica Award** at 2017 IEEE Fourth International Conference on Image Information Processing (**ICIIP**). in 12th IEEE International Conference held at JPUIT, HP, India for the paper entitled: “**A NEW REVERSIBLE STEGNOGRAPHIC TECHNIQUE BASED ON PIXEL REPETITION METHOD (PRM) AND SPECIAL DATA SHIFTING (SDS)**”.
- Received **Best Research Paper Award** in IEEE International Conference on Advances in Electronics, Computers and Communication (ICA ECC-2014) 10-11 October-2014, at Bangalore India for the Research paper Entitled “**FRAGILITY EVALUATION OF INTERMEDIATE SIGNIFICANT BIT EMBEDDING (ISBE) BASED DIGITAL IMAGE WATERMARKING SCHEME FOR CONTENT AUTHENTICATION**”
- Received **Best Research Paper Award** in 12th IEEE International Conference (INDICON -2015) on Electronics, Energy, Environment, Communication, Computers, Control (E³-C³), 17-20 December, 2015, Jamia Millia Islamia, New Delhi India for the research paper entitled “**ON THE REALIZATION OF ROBUST WATERMARKING SYSTEM FOR MEDICAL IMAGES**” in the track of *Signal and Image Processing*.
- Received **Best Research Paper Award** in 12th IEEE International Conference (INDICON -2015) on Electronics, Energy, Environment, Communication, Computers, Control (E³-C³), 17-20 December, 2015, Jamia Millia Islamia, New Delhi India for the research paper entitled “**BIT ERROR RATE (BER) IMPROVEMENT OF MULTIPLE INPUT MULTIPLE OUTPUT ORTHOGONAL FREQUENCY DIVISION MULTIPLEXING (MIMO-OFDM) SYSTEM USING BIT LEVEL SCRAMBLING**” in the track of *Communication Engineering*.
- Awarded prestigious **Junior Research Fellowship in Electronic Science** by University Grants Commission (UGC), Government of India in 2008.

FELLOWSHIPS AND SCHOLARSHIPS

1. Received **Junior Research Fellowship** from UGC India.
2. Received **Merit scholarship** from Kashmir University.
3. Qualified **MHRD fellowship** Examinations

EDITORIAL EXPERIENCE

a. Book(s)

Name of the Book: Multimedia Security - Algorithm Development, Analysis and Applications

Role: Editor

Publisher: Springer

b. Journals

1. Special issue on **Emerging Technologies for Security and Authentication of Electronic Health Record (EHR): Opportunities and Challenges**, International Journal of E-Health and Medical Communications (IJEHMC), IGI Global Publications.

RESEARCH PUBLICATIONS

JOURNALS

S. No.	Authors	Paper Title, Journal Name, Volume and page details	Impact Factor
76.	Javaid A. Kaw, Nazir A. Loan, Shabir A. Parah , Khan Muhammad, Javaid A. Sheikh, & G. M. Bhat	A reversible and secure patient information hiding system for IoT driven e-health, <i>International Journal of Information Management</i> , 2019	14.09
75.	A. Kamili, N. N. Hurrah, Shabir A. Parah , G. M. Bhat and K. Muhammad	DWFCAT: Dual Watermarking Framework for Industrial Image Authentication and Tamper Localization, <i>IEEE Transactions on Industrial Informatics</i> , 2020.	10.22
74.	N. Hurrah, Shabir A. Parah , N. A. Loan, J A. Sheikh.	INDFORG: Industrial Forgery Detection using Automatic Rotation Angle Detection and Correction, <i>IEEE Transactions on Industrial Informatics</i> , 2020	10.22
73	Shabir A. Parah , J.A. Kaw, Nazir A. Loan, P. Bellavista, G. M. Bhat, and K. Muhammad	Efficient Security and Authentication for Edge-based Internet of Medical Things, <i>IEEE Internet of Things Journal</i> , 2020.	9.37

72	Parsa Sarosh, Shabir A. Parah , G. Mohiuddin Bhat., Khan Muhammad	Secret Sharing-based Personal Health Records Management for the Internet of Health Things, Sustainable Cities and Society, 2021,103129,https://doi.org/10.1016/j.scs.2021.103129.	7.53
71.	Aiman Jan, Shabir A. Parah , Bilal A. Malik, Mamoon Rashid	Secure data transmission in IoTs based on CLoG edge detection, <i>Future Generation Computer Systems</i> , 121, 59-73, 2021	7.19
70.	Nasir N. Hurrah, Shabir A. Parah , Nazir A. Loan, Javaid A. Sheikh, Mohammad Elhoseny & Khan Muhammad,	Dual watermarking framework for privacy protection and content authentication of multimedia, <i>Future Generation Computer Systems</i> , vol. 94, pp. 654-673, 2019.	7.19
69.	Shabir A. Parah , Jahangir A. Akhoun, Nazir A. Loan, Javaid A. Sheikh	Electronic Health Record hiding in Images for smart city applications: A computationally efficient and reversible information hiding technique for secure communication, <i>Future Generation Computer Systems, Elsevier publications</i> , 2018.	7.19
68.	Solihah Gull, Nazir A. Loan, Shabir A. Parah , Javaid A. Sheikh, & G. M. Bhat	An efficient watermarking technique for tamper detection and localization of medical images, <i>Journal of Ambient Intelligence and Humanized Computing</i> , 2018.	7.10
67.	Javaid A. Sheikh, Mehboob-ul-Amin, Shabir A. Parah , G. Mohiuddin Bhat	Impact of antenna and beam-selection-based sectored relay planning for performance evaluation of 4G LTE-A tri-sectored cell, <i>Digital Communications and Networks</i> , 5 (2), 121-130, 2019.	6.79
66.	Shabir A. Parah , Farhana Ahad, Javaid A. Sheikh, G.M. Bhat	Hiding clinical information in medical images: A new high capacity and reversible data hiding technique, <i>Journal of Biomedical Informatics</i> , 66, 214-230. 2017.	6.31
65.	Nazir A. Loan, Shabir A. Parah , Javaid A. Sheikh, Jahangir A. Akhoun, Ghulam M. Bhat	Hiding Electronic Patient Record (EPR) in medical images: A high capacity and computationally efficient technique for e-healthcare applications, <i>Journal of Biomedical Informatics</i> 73, 125–136, 2017	6.31
64.	Shabir A. Parah , Nazir A. Loan, Asif A. Shah, Javaid A. Sheikh, G. M. Bhat	A new secure and robust watermarking technique based on logistic map and modification of DC coefficient, <i>Non-linear Dynamics</i> , vol. 93, no. 4, pp. 1933-1951, 2018.	5.02
63.	Nazir A. Loan, Shabir A. Parah , Javaid A. Sheikh, Ghulam M. Bhat	Secure and Robust Digital Image Watermarking using Coefficient Differencing and Chaotic Encryption, <i>IEEE Access</i> , 6(1), 19876-19897, 2018.	3.36
62	Nasir N. Hurrah, Shabir A. Parah , Nazir A. Loan, Javaid A. Sheikh, F.	Secure data transmission framework for confidentiality in IoTs, <i>Ad-Hoc networks</i> , Elsevier, 2019	4.11

	Trjuman, Elhoseny & Khan Muhammad		
61.	H. Aljuaid, & Shabir A. Parah	Secure Patient Data Transfer Using Information Embedding and Hyperchaos, <i>Sensors</i> , 21(1), 282, 2021	3.57
60.	Nasir N. Hurrah, Nazir A. Loan, Shabir A. Parah & Javaid A. Sheikh	A hybrid Transform Based Secure and Robust Watermarking Technique for Privacy for Medical Applications, <i>International journal of advance research in science and engineering (IJARSE)</i> , 7(4), 3066-3078	2.83
59.	Solihah Gull, Shabir A. Parah , Khan Muhammad	Reversible data hiding exploiting Huffman encoding with dual images for IoMT based healthcare, <i>Computer Communications</i> 163, 134-149, 2020	3.16
58	Parsa Sarosh, Shabir A. Parah , G. Mohiuddin Bhat, Khan Muhammad	A Security Management Framework for Big Data in Smart Healthcare, <i>Big Data Research</i> , 25, 100225, 2021	3.57
57.	Shabir A. Parah , Javaid A. Sheikh, Nazir Loan, G. Mohiuddin Bhat.	Robust and blind Watermarking technique in DCT domain using Inter- Block Coefficient Differencing, <i>Digital Signal Processing, Elsevier</i> . 2016, 53, 11-24,	3.38
56.	Norah Alassaf, Adnan Gutub, Shabir A. Parah , Manal Al Ghamdi	Enhancing speed of SIMON: A light-weight-cryptographic algorithm for IoT applications, <i>Multimedia Tools and Applications</i> , 2018	2.75
55.	Nasir Hurrah, Shabir A. Parah , Javaid A. Sheikh	Embedding in medical images: an efficient scheme for authentication and tamper localization, <i>Multimedia tools and Applications</i> , 2020	2.75
54.	R. Mansour, Shabir A. Parah	Reversible Data Hiding for Electronic Patient Information Security for Telemedicine Applications. <i>Arab J Sci Eng</i> (2021). https://doi.org/10.1007/s13369-021-05716-2	2.53
53.	Shabir A. Parah , Javaid A. Sheikh, Nazir A. Loan, Farhana Ahad, Ghulam M. Bhat	Utilizing neighbourhood coefficient correlation: a new image watermarking technique robust to singular and hybrid attacks, <i>Multidimensional Systems and Signal Processing</i> , 29(3), 1095-1117, 2017	2.03
52.	Shabir A. Parah , Javaid A. Sheikh, G. Mohiuddin Bhat,	Hiding in encrypted images: A three tier security data hiding system, <i>Multidimensional systems and Signal Processing, Springer</i> , 28(2), 549-572, 2015.	2.03
51.	Ifrah Afzal, Shabir A. Parah , O.Y. Song	Secure patient data transmission on resource constrained platform, <i>Multimedia Tools and Applications</i> , https://link.springer.com/article/10.1007/s11042-020-09139-3	2.75

50.	Shifa Showkat, Shabir A. Parah , Solihah Gull,	Embedding in medical images with contrast enhancement and tamper detection capability, <i>Multimedia Tools and Applications</i> , 80, 2009–2030, 2021.	2.75
49.	Parsa Sarosh, Shabir A. Parah and G. Mohiuddin Bhat,	Utilization of secret sharing technology for secure communication: a state-of-the-art review, <i>Multimedia Tools and Applications</i> , 80, 517–541, 2021	2.75
48.	Shabir A. Parah , Farhana Ahad, Sheikh, Javaid A. Sheikh. et al	A New Reversible and high-capacity data hiding technique for E-healthcare applications. <i>Multimedia Tools and Applications, Springer</i> , 76, 3943–3975, 2017.	2.75
	M. Gani, K. A. Shah and Shabir A. Parah	Realization of a sub-10nm Silicene Magnetic Tunnel Junction and its Application for Magnetic Random-Access Memory and Digital logic, <i>IEEE Transactions on Nanotechnology</i> , 2021	2.57
47.	Shabir A. Parah , Farhana Ahad, Javaid A. Sheikh, Nazir A. Loan, G.M. Bhat	Reversible and high-capacity data hiding technique for E-healthcare applications, <i>Multimedia Tools and Applications, Springer</i> . 2016, 76(3), 3943-3975	2.75
46.	Shabir A. Parah , Javaid A. Sheikh, Jahangir Ahmad Akhoun, G. M. Bhat.	Information hiding in edges: A high-capacity information hiding technique using hybrid edge detection, <i>Multimedia Tools and Applications, Springer</i> . 2016, 77(1), 185-207	2.75
45.	S. Fayaz, Shabir A. Parah , G. J. Qureshi, V. Kumar	Underwater image restoration: A state-of-the-art review, <i>IET Image Process</i> , 15, 269–285, 2021	2.37
44.	Asif A. Shah, Shabir A. Parah , Mamoon Rashid & Mohamed Elhoseny	Efficient image encryption scheme based on generalized logistic map for real time image processing, <i>Journal of Real-Time Image Processing Springer</i> , 17, 2139–2151, 2020	2.35
43.	M. Gani, KA. Shah, Shabir A. Parah , P. Misra	Room temperature high Giant Magnetoresistance graphene-based spin valve and its application for realization of logic gates, <i>Physics Letters A</i> , 384(7), 12617, 2020	2.65
42.	Kamili, Asraa, Fatima, Izata, Muzamil Hassan, Shabir A. Parah , Vijaya Kumar, L. S. Ambati	Embedding information reversibly in medical images for e-health, <i>Journal of Intelligent & Fuzzy Systems</i> , 39(6), 8389-8398, 2020	1.851
41.	M. Hussain, Shabir A. Parah , S. Gull	Tamper Detection and Self-Recovery of Medical Imagery for Smart Health, <i>Arab J Sci Eng</i> , 46, 3465–3481, 2021	2.53

40.	Javaid A Sheikh, Mehboob Ul Amin, Shabir A. Parah , G. M Bhat	Towards Green Capacity in Massive MIMO Based 4G-LTE a Cell Using Beam-Forming Vector Based Sectored Relay Planning, <i>Journal of Wireless Personnel Communication</i> . 97(4), 5767-5781, 2017	1.62
39.	Shabir A. Parah , Javaid A. Sheikh, Umer I. Assad, G. M. Bhat	Realization and Robustness Evaluation of a Blind Spatial Domain Watermarking Technique, <i>International Journal of Electronics</i> . 4, 659-672, 2016.ar	1.33
38.	J. A. Sheikh, F. Mustafa, S. Sidiq, Shabir A. Parah et al.	A New Optimization Technique in Massive MIMO and LSAS using Hybrid Architecture and Channel Estimation Algorithm for 5G Networks, <i>Wireless Pers Commun</i> , 2021	1.62
37.	Javaid A Sheikh, Z. I. Mir, Shabir A Parah , G. M Bhat	A New Filter Bank Multicarrier (FBMC) Based Cognitive Radio for 5G Networks Using Optimization Techniques, 0.1007/s11277-020-07101-y, 2020	1.33
36.	Javaid A. Sheikh, Sakeena Akhter, Shabir A. Parah & G. M. Bhat	Blind digital speech watermarking using filter bank multicarrier modulation for 5G and IoT driven networks, <i>International Journal of Speech Technology</i> , 21(3), pp. 715-722, 2018	0.78
35.	Javaid A. Sheikh, Sakeena Akhter, Shabir A. Parah & G. M. Bhat	A new method of speech transmission over space time block coded co-operative MIMO-OFDM networks using time and space diversity, <i>International Journal of Speech Technology</i> , 21(1), pp. 65-77, 2018.	0.78
34.	Javaid A. Sheikh, Shabir A. Parah , G. Mohiuddin Bhat	A new Multiple Input Multiple Output (MIMO) Multicarrier Direct Sequence Code Division Multiple Access (MC-DS-CDMA) System using T x T Spreading with Link Budget Analysis, <i>International Journal of Wireless and Mobile Computing</i> , 10 (2), 148-158, 2016.	0.7
33.	Mehboob Ul Amin, Javaid A. Sheikh, Shabir A. Parah & G. M. Bhat	Analytical analysis and effect of scrambling on inter-relay interference in a tri-sectored LTE-A network, <i>International Journal of Wireless and Mobile Computing</i> , 14(2), pp. 149-163, 2018	0.7
32.	Javaid A. Sheikh, Shabir A. Parah , Sakeena Akhtar & G. M. Bhat	Compression and denoising of speech transmission using Daubechies wavelet family, <i>International Journal of Wireless and Mobile Computing</i> , 12(4), pp. 313-334, 2017.	0.7
31.	Javaid A Sheikh, Mehboob ul Amin, Shabir A Parah , Sabba Amin & G.M Bhat	On Exploiting MIMO technology for achieving maximum Detection Probability and mitigating Interference in Tri-Sectored co-operative Cognitive Radio networks, <i>International Journal of Wireless and Mobile Computing</i> , 13(3), 200-216, 2017.	0.7

30.	Shabir A. Parah , Javaid A. Sheikh, Neelanjan Dey, G. Mohiuddin Bhat	Realization of a new robust and secure watermarking technique using DC coefficient modification in pixel domain and chaotic encryption, <i>Journal of Global Information Management</i> , 26(4), 2017.	1.3
29.	Shabir A. Parah , Javaid A. Sheikh, M. Hafiz, G. Mohiuddin Bhat	Data hiding in scrambled images: A new double layer security data hiding technique, <i>Computers and Electrical Engineering, Elsevier</i> , Volume 40, Issue 1, January 2014, Pages 70-82.	3.81
28.	A. M. Hafiz, Shabir A. Parah , R. A. Bhat	Reinforcement learning applied to machine vision: state of the art, <i>International Journal of Multimedia Information Retrieval</i> volume 10, 71–82, 2021.	3.20
27.	Nasir N. Hurrah, Nazir A. Loan, Shabir A. Parah , Zaffer Iqbal	Area Optimized Decimation Filter for Wideband $\Sigma\Delta$ Analog to Digital Converters, <i>Journal of Emerging Technologies and Innovative Research</i> , 3(2), 334-341,2019.	0.3
26.	Nasir Hurrah, Nazir Loan, Shabir A. Parah , Javaid Ahmad	Realization of Highly Secure Fragile Watermarking Technique for Authentication of Digital Images, <i>Advanced Research in Electrical and Electronic Engineering</i> , 5 (3), 188-192, 2018.	2.2
25.	A. Shah & Shabir A. Parah	Chaos based novel cryptographic technique based on a new logistic map, <i>International Journal of Social Computing and Cyber-Physical Systems</i> , vol 2(1)-73-94, 2017.	NA
24.	Mehboob Ul Amin, Javaid A Sheikh, Shabir A Parah , G. M Bhat	Capacity enhancement and performance evaluation in 4G LTE-advanced networks using sectorized relaying, <i>Asian Journal of Current and Engineering and Math</i> , vol 5. iss1.45. pp-12-16, 2016	NA
23.	Shabir A. Parah , Irfan Mahmood, Mohammad Sajjad	Emerging Technologies for Security and Authentication of Electronic Health Record (EHR): <i>Opportunities and Challenges (Guest Editorial), Special Issue, IJEHMC</i> .	NA
22.	Javaid Sheikh, Mehboob ul Amin, Sahir Majeed, Sakeena Akhter, Shabir Parah	On the Design and Performance Evaluation of Peak to Average Power Ratio (PAPR) using Hybrid Transform Techniques in MIMO-OFDM. <i>International Journal of Computer Applications</i> , 141(4), 30-34, 2016.	0.8
21.	Javaid Sheikh, Sakeena Akhter, Mehboob ul Amin, Sahir Majeed, Shabir Parah	On the Design and Performance Evaluation of DWT based Compressed Speech Transmission with Convolutional Coding, <i>Communications on Applied Electronics (CAE)</i> , 4, no. 9 36-40, 2016.	NA

20	Javaid A. Sheikh, Shabir A. Parah, Jai P. K. Wazir & G. M. Bhat	Performance Evaluation of Adaptive Noise Canceller Based on Multirate Filter Technique, <i>International Journal of Modern Electronics and Communication Engineering (IJMECE)</i> , 4(4), pp. 35-39, 2016	NA
19.	Subba Amin, Anurag Sharma, Mehboob-ul-Amin, Javaid A. Sheikh, Shabir A. Parah, & G. M. Bhat,	PAPR reduction in MIMO-OFDM system for various M-Aray Phase Modulations using Discrete Wavelet Transform, <i>Australian journal of information technology and communication</i> , 3(2), 1-10, 2015	NA
18.	Nasir Hurrah, Nazir Loan, Shabir A. Parah, Javaid Ahmad	Realization of Highly Secure Fragile Watermarking Technique for Authentication of Digital Images, <i>Advanced Research in Electrical and Electronic Engineering</i> , 5 (3), 188-192, 2018.	NA
17.	Shabir A. Parah , Javaid A. Sheikh, , G. Mohiuddin Bhat	A secure and robust information hiding technique for covert communication, <i>International Journal of Electronics</i> , <i>Taylor and Francis</i> , vol. 102, No. 8, 1253–1266, 2014	1.33
16.	Shabir A. Parah , Javaid A. Sheikh, G. Mohiuddin Bhat	A secure and efficient spatial domain data hiding technique based on pixel adjustment, <i>American Journal of Engineering and Technology Research</i> , <i>US Library Congress</i> . 2014, (USA), Vol. 14, No. 2 pp. 38-44.	0.5
15.	Javaid A. Sheikh, Shabir A. Parah , G. Mohiuddin Bhat, Mehboob- ul-Amin	A new method for PAPR reduction in OFDM using Embedded Transform Techniques. <i>Network Engineering</i> , <i>Elixir Network Engg.</i> 63 (2013) 18504-18511.	0.45
14.	Shabir A. Parah , Javaid A. Sheikh, G. Mohiuddin Bhat	Data hiding in color images: A high-capacity data hiding technique for covert communication, <i>Computer Engineering and Intelligent Systems</i> , Vol 4, No 13, 107-115, 2013	4.1
13.	Javaid A. Sheikh, Shabir A. Parah , G. Mohiuddin Bhat, Mehboob- ul-Amin	A New Method of PAPR reduction in MIMO-OFDM System using combination of OSTBC Encoder and TXT Spreading Code Sequence, <i>Network Engineering</i> , <i>Elixir Network Engg</i> , 63 (2013) 18518-18521.	0.45
12.	Javaid A. Sheikh, Shabir A. Parah , G. Mohiuddin Bhat, Mehboob- ul-Amin.	Performance evaluation of various MIMO based digital modulation techniques using Minimum mean square error (MMSE) combining, <i>Network Engineering</i> , <i>Elixir Network Engg.</i> 63, 18512-18517, 2013	0.45
11.	Shabir A. Parah , Javaid A. Sheikh, G. Mohiuddin Bhat	On the realization of a secure, high-capacity data embedding technique using joint top-down and down-top embedding approach, <i>Elixir Comp. Sci. & Engg.</i> 49 (2012) 10141-10146 (UK)	3.1

10.	Shabir A. Parah , Javaid A. Sheikh, G. M. Bhat	High-capacity data embedding using joint intermediate significant bit and least significant technique, <i>International Journal of Information Engineering and Applications</i> , Vol. 2, no.11, pp. 1-11, 2012.	3.2
9.	Shabir A. Parah. , Javaid A. Sheikh, G. M Bhat	FPGA implementation of non-linear combinational code generator for image encryption and digital image watermarking, <i>International transactions on Electrical, Electronics and Communication Engineering</i> . Vol. 2. No.5. pp 8- 16- 2012.	NA
8.	Shabir A. Parah , Javaid A. Sheikh, G. Mohiuddin Bhat	On the Realization of Non-Linear Pseudo-Noise Generator for various Signal Processing and Communication Applications, <i>International Journal of Information Engineering and Applications</i> , Vol.2 no.5, pp 1- 8, 2012.	0.45
7.	Shabir A. Parah , Javaid A. Sheikh G. Mohiuddin Bhat	On the Design and Realization of Intermediate Frequency Hopping Spread Spectrum for CDMA applications (IFH- SS), <i>Elixir Network Engg.</i> 49 (2012) 9999-10003. (UK).	3.2
6.	Javaid A. Sheikh, Shabir A. Parah , G. Mohiuddin Bhat	Realization and Performance Evaluation of Parallel Interference Cancellation (PIC) based Code Division Multiple Access (CDMA) transmission over Rayleigh Fading Channel, <i>Elixir Network Engg</i> , 44 (2012) 7531-7535	0.45
5.	Shabir A. Parah , Javaid A. Sheikh, G. Mohiuddin Bhat	On the Realization of Secure and Efficient Data Hiding System using ISB & LSB Technique, <i>Engineering e-Transaction, Malaysia</i> , (ISSN 1823-6379) Vol. 7, No 2, 2012	NA
4.	G. M. Bhat, Shabir Ahmad , Javaid Ahmad	FPGA Implementation of Novel Complex PN Code Generator based data Scrambler and Descrambler, <i>International journal of Science and Technology</i> , 4 (01), 125-135, 2010.	0.72
3.	G. M. Bhat, Javaid Ahmad, Shabir Ahmad	On the Design and Realization of Novel PN Code Based Chaotic Signal Generator for CDMA applications, <i>Indian Journal of Science and Technology, Coimbatore, Chennai, India</i> , vol. 3. No. 5 (May. 2010) pp 554- 556.	NA
2.	G. M. Bhat, Shabir Ahmad, Javaid Ahmad.	VHDL Modelling and Simulation of Data Scrambler and Descrambler for secure data communication, <i>Indian Journal of Science and Technology, Coimbatore, Chennai, India</i> . (Oct 2009), Vol.2 No 10, 41-43.	NA
1.	G. M Bhat, Shabir Ahmad , Javaid Ahmad	Innovative DTMF Remote Control System, ezine, National Science and Technology Board (NSTEDB), <i>Journal of Department of Science and Technology</i> , Govt of India. (Technical Publication) oct-2008	NA

INTERNATIONAL CONFERENCES

S. No.	Authors	Paper Title, Conference details
49.	S. A. Malik, S. A. Parah and G. M. Bhat	"Electrocardiogram (ECG) denoising method utilizing Empirical Mode Decomposition (EMD) with SWT and a Mean based filter," 2021 2nd International Conference on Intelligent Engineering and Management (ICIEM), 2021, pp. 322-326, doi: 10.1109/ICIEM51511.2021.9445297.
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- S 58. Solihah Gull & **Shabir A. Parah**, “Watermarking Techniques for Authentication and Tamper Detection: A Survey”, SEEDS 2018, UGC sponsored National Seminar on Electronic Devices, Systems and Information Security, 3-4 April, 2018, pp: 60, University of Kashmir.
- S 57. Haris Shah, Nimrah Habib & **Shabir A. Parah**, “Image Compression and Decompression Based on Probability”, SEEDS 2018, UGC sponsored National Seminar on Electronic Devices, Systems and Information Security, 3-4 April, 2018, pp: 63, University of Kashmir.
- S 56. Muzamil Hussan and **Shabir A. Parah**, “Image Compression Techniques Based on SVD: A Survey”, SEEDS 2018, UGC sponsored National Seminar on Electronic Devices, Systems and Information Security, 3-4 April, 2018, pp: 64, University of Kashmir.
- S 55. Sakeena Akhtar, Javaid A. Sheikh, **Shabir A. Parah**, Zaffer Iqbal, “*BER Analysis of Speech Transmission in Fading Environment Using MIMO-FBMC and OFDM for Future 5G Mobile Communications Technology*”, 13th–JK Science Congress, 02-04 April 2018, pp. 673, University of Kashmir.
- S 54. Nasir N. Hurrah, Nazir A. Loan, Jahangir A. Akhoon, **Shabir A. Parah**, Javaid A. Sheikh, “*A Highly Sensitive Encryption Technique for High Security Watermarking Applications*”, 13th–JK Science Congress, 02-04 April 2018, pp. 658, niversity of Kashmir.
- S 53. Aiman Jan, **Shabir A. Parah**, Bilal A. Malik, Javaid A. Sheikh, G. M. Bhat, “*An Overview of the Image Edge Detection Techniques for Information Hiding*”, 13th–JK Science Congress, 02-04 April 2018, pp. 663, University of Kashmir.
- S 52. Muzamil Hussan, **Shabir A. Parah**, Ghulam G. Qureshi, Javaid A. Sheikh, G. M Bhat, “*Overview of Different Watermarking Techniques for Copyright Protection and Authentication*”, 13th–JK Science Congress, 02-04 April 2018, 694 University of Kashmir.
- S 51. Nazir A. Loan, Nasir N. Hurrah, **Shabir A. Parah**, Jahangir A. Akhoon, Javaid A. Sheikh, “*Blind Robust Image Rotation Estimation Technique Based on Pythagorean Theorem*”, 13th–JK Science Congress, 02-04 April 2018, pp. 674, University of Kashmir.
- S 50. Solihah Gull, **Shabir A. Parah**, “*High Capacity Watermarking Technique for Authentication of Medical Images*”, 13th–JK Science Congress, 02-04 April 2018, pp. 687, University of Kashmir.

- S 49. Aaqib A. Reshi, **Shabir A. Parah**, “*DICOM: An Overview and Challenges*”, 13th–JK Science Congress, 02-04 April 2018, pp. 679, University of Kashmir.
- S 48. Sameena Shah, **Shabir A. Parah**, “*Digital Image Compression Using Bit Plane Coding*”, 13th–JK Science Congress, 02-04 April 2018, pp. 680, University of Kashmir.
- S 47. Syed S. S. Bukhari & **Shabir A. Parah**, “*Merging Cloud with IoT (Internet of Things)*”, 13th–JK Science Congress, 02-04 April 2018, pp. 712, University of Kashmir.
- S 46. Asif A. Shah, **Shabir A. Parah**, “*A New RBG Image Encryption Technique Based on Efficient Permutation Using Modified Logistic Map*”, SEEDS 2017, UGC sponsored National Seminar on Electronic Devices, Systems and Information Security, 24-25 March, 2017, pp: 10, University of Kashmir.
- S 45. Nazir A. Loan, Jahangir A. Akhoun, Nasir N. Hurrah, **Shabir A. Parah**, Javaid A. Sheikh, “*High Capacity Reversible Data Hiding Technique based on Image Resize and Pixel Scrambling*”, SEEDS 2017, UGC sponsored National Seminar on Electronic Devices, Systems and Information Security, 24-25 March, 2017, pp: 22, University of Kashmir.
- S 44. Javaid. A. Kaw, Nazir A. Lone, G. M. Bhat, Javaid A. Sheikh, Mehboob-Ul-Amin, **Shabir A. Parah**, “*Reversible Stenographic Technique Based on Pixel Repetition Method and Data Shifting*”, SEEDS 2017, UGC sponsored National Seminar on Electronic Devices, Systems and Information Security, 24-25 March, 2017, pp: 58, University of Kashmir.
- S 43. Nasir N. Hurrah, Nazir A. Loan, Jahangir A. Akhoun, Issmat S. Masoodi, **Shabir A. Parah**, Javaid A. Sheikh, “*A Multipurpose Robust Watermarking Algorithm with Multilayer Security*”, SEEDS 2017, UGC sponsored National Seminar on Electronic Devices, Systems and Information Security, 24-25 March, 2017, pp: 66, University of Kashmir.
- S 42. G. M. Bhat, Uzma, Javaid A. Sheikh, **Shabir A. Parah**, “*Study of Various Synchronization Techniques for Orthogonal Frequency Division Multiplexing (OFDM)-A Review*”, SEEDS 2017, UGC sponsored National Seminar on Electronic Devices, Systems and Information Security, 24-25 March, 2017, pp: 72, University of Kashmir.
- S 41. Mehboob ul Amin, Javaid A. Sheikh, **Shabir A. Parah**, G. M. Bhat. “*Massive MIMO for Efficient and Computationally Efficient Receiver Design using Beamforming Vector: A Future for Cellular Internet of Things and 5G*”, SEEDS 2017, UGC sponsored National Seminar on Electronic Devices, Systems and Information Security, 24-25 March, 2017, pp: 87, University of Kashmir.
- S 40. Sakeena Akhtar, Javaid A. Sheikh, **Shabir A. Parah**, G. M. Bhat, “*Speech Signal Compression and Transmission using Daubechies Wavelets in a Space Time Block Coded Cooperative MIMO-OFDM Systems*”, SEEDS 2016, UGC sponsored National Seminar on Electronic Devices, Systems and Information Security, 18-19 March, 2016, pp: 54, University of Kashmir.
- S 39. Javaid A. Sheikh, Jai Preet K. Wazir, **Shabir A. Parah**, G. M. Bhat, “*On the Design and Realization of Adaptive Noise Canceller based on Multirate Filter Techniques*”, SEEDS 2016, UGC sponsored National Seminar on Electronic Devices, Systems and Information Security, 18-19 March, 2016, pp: 56, University of Kashmir.
- S 38. Uzma Bhat, Javaid A. Sheikh, **Shabir A. Parah**, G. M. Bhat, “*Study of Various Multiple Access Extensions of OFDM for 4G Broadband Wireless Communication Systems*”, SEEDS 2016, UGC sponsored National Seminar on Electronic Devices, Systems and Information Security, 18-19 March, 2016, pp: 57, University of Kashmir.
- S 37. Nazir A. Loan, **Shabir A. Parah**, Javaid A. Sheikh, Nasir N. Huurah, Jahangir A. Akhoun, “*Robust Watermarking for General and Medical Images in Pixel Domain*”, SEEDS 2016, UGC sponsored National Seminar on Electronic Devices, Systems and Information Security, 18-19 March, 2016, pp: 61, University of Kashmir.
- S 36. Nasir Nabi Hurrah, Javaid A. Sheikh, **Shabir A. Parah**, Jahangir A. Akhoun, “*Robust Watermarking Scheme with two Layer Security and Adaptive Strength*”, SEEDS 2016, UGC sponsored National Seminar on Electronic Devices, Systems and Information Security, 18-19 March, 2016, pp: 69, University of Kashmir.

- S 35. Jahangir Ahmad Akhooon, **Shabir A. Parah**, Javaid A. Sheikh, Nazir A. Loan, Nasir N. Hurrah, “*On the Realization of a High Capacity Data Hiding Technique for Color Images using Edge Detection*”, SEEDS 2016, UGC sponsored National Seminar on Electronic Devices, Systems and Information Security, 18-19 March, 2016, pp: 76, University of Kashmir.
- S 34. Farhana Ahad, **Shabir A. Parah**, “*E-healthcare System: A Pillar of Digital India*”, SEEDS 2016, UGC sponsored National Seminar on Electronic Devices, Systems and Information Security, 18-19 March, 2016, pp: 79, University of Kashmir.
- S 33. **Shabir A, Parah**, Farahana Ahad, Javaid A. Sheikh and G. M. Bhat, “*Reversible Data Hiding Technique for E-Health Care applications*”, 11th-JK Science Congress, 12-14 October 2015, University of Kashmir.
- S 32. **Shabir Ahmad**, Javid Ahamd, Jahangir Ahmad, Nazir Ahmad, Nasir Hurrah and Farhana Ahad, “*High Capacity Steganographic Technique based on Modular Arithmetic*”, 11th-JK Science Congress, 12-14 October 2015, University of Kashmir.
- S 31. Javaid A. Sheikh, Zamir Ahmad, **Shabir A. Parah** and Dinesh Kumar, “*A Compact Dual Band MIMO Antenna for WLAN applications*”, 11th-JK Science Congress, 12-14 October 2015, University of Kashmir.
- S 30. Nasir Nabi Hurrah, **Shabir Ahmad Parah**, Javaid Ahmad Sheikh, Nazir ahmad Loan and Jahangir Ahmad Akhooon, “*Hardware realization of Watermarking Algorithm for Multimedia Applications*”, 11th-JK Science Congress, 12-14 October 2015, University of Kashmir.
- S 29. Javaid A. Sheikh, **Shabir A. Parah**, Sakeena Akhtar and Mir Mohammad Yousuf, “*On the design and performance evaluation of Haar And Db10 based compressed speech Transmission with Convolutional Coding.*” 11th-JK Science Congress, 12-14 October 2015, University of Kashmir.
- S 28. Javaid A. Sheikh, Uzma, **Shabir A. Parah** and G. M. Bhat, “*Robust Multi-Media Transmission using Multiple Input Multiple Output Orthogonal Frequency Division Multiplexing (Mimo-OFDM)*”, 11th-JK Science Congress, 12-14 October 2015, University of Kashmir.
- S 27. Javaid A. Sheikh, **Shabir A. Parah** and Jai Preet Kour Wazir, “*Performance Evaluation and Comparison of various Multirate Filters for Sigma –Delta Modulator*”, 11th-JK Science Congress, 12-14 October 2015, University of Kashmir.
- S 26. Mehboob Ul Amin, Javaid A Sheikh, **Shabir A Parah**, G. M. Bhat and Saba Amin, “*Expanding LTE Network Spectrum with Cognitive Radio and the incorporation of MIMO Antennas for Enhancing the Detection Probability of the target*”, 11th-JK Science Congress, 12-14 October 2015, University of Kashmir.
- S 25. Javaid A Sheikh, **Shabir A Parah** , Sakeena Akhtar, G.M. Bhat, “*Effect of New Hybrid Techniques on Speech Compression*”, SEEDS 2015, UGC sponsored National Seminar on Electronic Devices, Systems and Information Security, 16-17 March, 2015, pp: 46, University of Kashmir.
- S 24. G. M. Bhat, Uzma, Javaid Ahmad Sheikh, **Shabir Ahmad Parah**, “*Study of Channel Estimation Techniques in Multiple Input Multiple Output Orthogonal Frequency Division Multiplexing (MIMO-OFDM)- A Review*”, SEEDS 2015, UGC sponsored National Seminar on Electronic Devices, Systems and Information Security, 16-17 March, 2015, pp: 33, University of Kashmir.
- S 23. Javaid A Sheikh, Jai Preet Kour Wazir, **Shabir Ahmad Parah**, G.M. Bhat, “*Performance Enhancement of Digital Receivers Using Interpolation Multirate Filter*”, SEEDS 2015, UGC sponsored National Seminar on Electronic Devices, Systems and Information Security, 16-17 March, 2015, pp: 47, University of Kashmir.
- S 22. G. M. Bhat, Javaid Ahmad Sheikh, **Shabir Ahmad Parah**, Uzma, Nahiya Malik, Misbah, “*Performance Evaluation of Multi User DS-SS System over Multipath Fading Channel using New Gold Code*”, SEEDS 2015, UGC sponsored National Seminar on Electronic Devices, Systems and Information Security, 16-17 March, 2015, pp: 54, University of Kashmir.
- S 21. Javaid A Sheikh, Mehboob ul Amin, **Shabir Ahmad Parah**, G.M. Bhat, “*Performance Evaluation of Peak to Average Power Ratio (PAPR) using Transform Techniques in MIMO-OFDM*”, SEEDS 2015, UGC sponsored National Seminar on Electronic Devices, Systems and Information Security, 16-17 March, 2015, pp: 49, University of Kashmir.

- S 20. Javaid A. Sheikh, **Shabir A. Parah**, G. Mohiuddin Bhat, “*Multiple Input Multiple Output Orthogonal Frequency Division Multiplexing (MIMO- OFDM) based Image Transmission with Improved Peak to Average Power Ratio (PAPR)*”, 9th J & K Science Congress and Regional Science Congress, University of Kashmir, Srinagar, 1- 3, Oct. 2013.pp-274.
- S 19. G. Mohiuddin Bhat, M. Rafiq Dar, **Shabir A. Parah**, Javaid A. Sheikh, “*A Comparative Analysis of Stenographic Techniques in Transform Domain*”, 9th J & K Science Congress and Regional Science Congress, University of Kashmir, Srinagar, 1- 3, Oct. 2013.pp-273.
- S 18. G. Mohiuddin Bhat, Irshad A. Bhat, **Shabir A. Parah**, Javaid A. Sheikh, “*Performance Evaluation of various Peak to Average Power (PAPR) Reduction Techniques for Orthogonal Frequency Division Multiplexing (OFDM)*”, 9th J & K Science Congress and Regional Science Congress, University of Kashmir, Srinagar, 1- 3, Oct. 2013.pp-274.
- S 17. **Shabir A. Parah**, Farhana Ahad, Syed Asifa Andrabi, Nighat Kowsar, Javaid A. Sheikh, G. Mohiuddin Bhat, “*Color Image Based Information Hiding System*”. 9th J & K Science Congress and Regional Science Congress, University of Kashmir, Srinagar, 1- 3, Oct. 2013.pp-281.
- S 16. Javaid A. Sheikh, **Shabir A. Parah**, Iqra Syed, G. Mohiuddin Bhat, “*On the Study High Speed and High Performance Digital Signal Processing (DSP) based Design Applications*”, 9th J & K Science Congress and Regional Science Congress, University of Kashmir, Srinagar, 1- 3, Oct. 2013.pp-274.
- S 15. Javaid A. Sheikh, **Shabir A. Parah**, G. Mohiuddin Bhat, “*Performance Evaluation of MIMO based Binary Phase Shift Keying (BPSK) over Rayleigh Fading Channel with Alamouti Space Time Block Coding*”, 9th J & K Science Congress and Regional Science Congress , University of Kashmir, Srinagar, 1- 3, Oct. 2013.pp-273.
- S 14. **Shabir A. Parah**, Javaid A. Sheikh, G. Mohiuddin Bhat, “*On the FPGA Implementation of Geffe-Generator Based stream Cipher for secure Communication*”. 9th J & K Science Congress and Regional Science Congress, University of Kashmir, Srinagar, 1- 3, Oct. 2013.pp-272.
- S 13. Javaid A. Sheikh, **Shabir A. Parah**, G. Mohiuddin Bhat, “*Performance Evaluation of various Digital Modulation Techniques using Multiple Input Multiple Output (MIMO) Wireless Communication System*”, 8th J & K Science Congress , University of Kashmir, Srinagar, 15- 17, Sep. 2012
- S 12. **Shabir A. Parah**, Javaid A. Sheikh, G. M Bhat., “*On the realization of data hiding technique using Zig- Zag embedding of secure data*”, 8th J & K Science Congress , University of Kashmir, Srinagar, 15- 17, Sep. 2012.
- S 11. Javaid A. Sheikh, **Shabir A. Parah**, G. Mohiuddin Bhat, “*Simulation and Modelling of Rayleigh Fading Channel for Wireless Communication applications*”, 7th J &K Science Congress Oct. 13- 15, 2011. Pp. 426
- S 10. Javaid A. Sheikh, **Shabir A. Parah**, G. Mohiuddin Bhat, “*On the Design and Realization of Novel FM based Chaotic Signal Generator for CDMA applications*” , 7th J &K Science Congress Oct. 13- 15, 2011. Pp. 148.
- S 9. **Shabir A. Parah**, Javaid A. Sheikh, G. Mohiuddin Bhat, “*On the Realization of non- linear Combinational Generator based data Encryptor/ Decryptor*”, 7th J &K Science Congress Oct. 13- 15, 2011. Pp. 171.
- S 8. **Shabir A. Parah**, Javaid A. Sheikh, G. Mohiuddin Bhat, “*Roboust and Secure imperceptible image Watermarking technique for copy right protection*”, 7th J &K Science Congress Oct. 13- 15, 2011. Pp. 172.
- S 7. **Shabir A. Parah**, Javaid A. Sheikh, G. Mohiuddin Bhat, “*FPGA Implementation of Parallel Gold Code Based Stream Cipher*, 6th J & K Science Congress. 2-4 Dec, 2010.
- S 6. G. M. Bhat, Javaid Ahmad, **Shabir Ahmad**, “*On the Design and Realization of Novel Gold code Generator for CDMA application*”, 6th J & K Science Congress.2-4 Dec, 2010.
- S 5. G. M. Bhat, Javaid Ahmad, **Shabir Ahmad**, “*On the realization of Novel PN code Generator for CDMA Applications*”, Proc. of 5th J&K Science Congress, University of "Jammu, J&K 2009.
- S 4. G. M. Bhat, **Shabir Ahmad**, Javaid Ahmad, “*VHDL Implementation of Novel Complex PN Code Generator*”, Proc. of 5th J&K Science Congress, University of Jammu, J&K 2009.

- S 3. G. M. Bhat, Javaid Ahmad, **Shabir Ahmad**, “*Design and Development of Encrypted Controller for Secure Data Transmission*”, National conference on current trends in mobile computing-2008 ,Baba Gulam Shah Badshah University, Rajouri J &K, pp-242-245.
- S 2. G. M. Bhat, Javaid Ahmad, **Shabir Ahmad**, “*Design and realization of Multiple Access Direct Sequence Spread Spectrum Trans- receiver for secure data transmission*”, Fourth J&K science congress, 2008. pp-269.
- S 1. G. M. Bhat, Javaid Ahmad, **Shabir Ahmad**, “*Secure Data Transmission using Pseudo random Process Shift Keying*”, Proc. of 3rd, J&K science congress, 2008, University of Jammu

ACTIVITIES PERTAINING TO INNOVATION/ INCUBATION AND IPR PROTECTION

- Delivered an Expert lecture on *Technoprenurship and IPR protection* in National level Orientation course organized by AICTE-ISTE and SSM College of Engineering on 07-05-2021
- Delivered Keynote talk on *Intellectual Property Rights and Patent Awareness* in one day seminar on Intellectual Property Rights Protection by Govt. degree college Pattan on 25-03-2021
- Delivered an invited talk on “*Watermarking-A new paradigm for IPR protection*” in international workshop on IPR protection and cyber security at IUST Awantipora on 8th June 2017.
- Member, European Alliance for Innovation, (**EAI**)
- Attended A two-day workshop cum mentoring Program at Gandhi Bhavan Kashmir University for INSPIRE Innovator's on 27-28 Nov, 2018.
- Appointed as Mentor for INSPIRE-MANAK 2018 by National innovation Foundation.
- Appointed as Jury for the state level INSPIRE Awards held at State Institute of Education.
- Appointed as Jury for District level INSPIRE-MANAK Awards for the Districts of Srinagar and Baramulla held at SIE Srinagar and DIET Baramulla respectively in June- July 2018.
- Appointed as Subject Expert (Electronics) for the evaluation of the innovative ideas/ prototypes for incubation for subsequent funding under DST-PRISM program.
- Appointed as Subject Expert (Electronics) for the evaluation of the innovative ideas/ prototypes for incubation for subsequent funding under DST-TePP program.

CONFERENCES/SEMINARS/SYMPOSIUM/WORKSHOPS ATTENDED

1. One month academic training programme on **MATLAB, and Mobile Communication**, in the Department of Electrical Engineering Faculty of Engineering and Technology, Jamia Millia Islamia, New Delhi. 25 Feb-23 March 2004.
2. 4th **J & K Science Congress**, University of Kashmir, Srinagar, (J&K) 25th to 27th July, 2006.
3. 5th **J& K Science Congress**, University of Jammu, (J&K) 26th to 28th Feb. 2008.
4. 6th **J& K Science Congress**, University of Kashmir, Srinagar, (J&K) 2nd to 4th Dec. 2010
5. One week Short term Course on **Multimedia Signal Processing** from 7-13 Feb. 2011, at Department of Electronics Engineering, Z.H. college of engineering and Technology, AMU, Aligrah, India.
6. Six days Short term Course on “**Mechatronics**” at Department of Electronics and Instrumentation technology, University of Kashmir from 21-26 June 2011.
7. 7th **J& K Science Congress**, University of Jammu, (J&K) 13th to 15th October 2011.
8. Two weeks training Programme in “**Recent Trends in VLSI Design and Embedded systems: (VDES-2012)**” from 23rd Jan to 3rd Feb. 2012, at Department of Electronics Engineering, Z.H College of Engineering AMU, Aligrah.
9. Two weeks training Programme in “**Recent Trends in Digital Signal Processing (DSP-2012)**” from 6th to 18th Feb. 2012, at Department of Electronics Engineering, Z.H College of Engineering AMU, Aligrah.

10. Two days IEEE sponsored Intl. Conference **INCOSSET**- 13-14 December 2012, Tiruchirapalli Tamilnadu, India
11. 8th **J & K Science Congress**, University of Kashmir, Srinagar, (J&K) 17-19 Sep. 2012
12. 60th General Orientation course at Academic Staff College University of Kashmir, 2nd to 28th March 2013.
13. 9th **J & K Science Congress** and Regional Science Congress, University of Kashmir, Srinagar, 1-3, Oct. 2013.
14. IEEE International Conference on Multimedia Signal Processing and Communication Technologies- **IMPACT** 2013 AMU, Aligarh-23- 25 Nov. 2013.
15. One week training programme on “**3G Communication Systems**” at National Institute of Technical teachers Training and research, NITTTR Chandigarh, 4-7 March-2014.
16. Attended two day state level workshop (August 1-2, 2014 at AS college) on RUSA organized by MHRD and Higher Education Department for vocationalization of Electronics subject at UG level.
17. IEEE International Conference on Advances in Electronics, Computers and Communication (ICAEE-2014), October 10-11, 2014, Bangalore India.
18. Attended three day workshop on MIC components for next generation wireless communication systems, Feb. 13-15, Indian Institute of Information Technology, design and management, Jabalpur.
19. Four weeks Refresher course/ Training programme at BRBRAITT Jabalpur On Telecommunications from 01-02-2015 to 27-02-2015
20. Three day International Conference ‘COMMUNE-2015’, March 16-18, 2015, organised by the Department of Electronics and Inst. Technology, university of Kashmir
21. Three day 11th JK science congress 12-14 October, 2015 at Kashmir University.
22. Four weeks training programme at BRBRAITT Jabalpur from 01-02-2015 to 27-02-2015.
23. Four day IEEE International Conference, IEEE- INDICON 2015 at Jamia Millia Islamia New Delhi, 17-20 December 2015.
24. Four weeks refresher course/ training programme at BRBRAITT Jabalpur in advanced telecommunications from 01-02-2016 to 27-02-2016.
25. One day work shop organized by Department of electronics on Forensic Investigation toolkit (FTK) on 23 Dec. 2016.
26. Two days national seminar SEEDS at department of Electronics KU, 24-25 March 2017
27. One day International workshop titled, "Cyber Communication: Security and Laws" at Islamic University of Science and Technology, Awantipora, on 8th of May, 2017
28. Three day IEEE international conference on Image Information Processing and Application–ICIIP-2017 at JP university of Information Technology, Wakanaghat, Solan, HP-India from 21-23 December 2017.
29. One week GIAN Workshop on “Logic Design under paradigm of rebooting computing” from 25-29 December 2017 at IIT Roorkee, Utrankhand India.
30. Three week refresher course on Electronics engineering at Central University of Hyderabad, February-March 2018.
31. One day National seminar SEEDS 2018, 2 April 2018 at Department of Electronics Kashmir University.
32. 13th JK Science congress from 2-4 April 2018, at University of Kashmir.
33. International conference at India International centre organised by Shastri Indo Candian Institute (SICI), “Engaging India and Canada: Challenges of sustainable development goals. 8-9 June 2018.
34. Two week refresher course on Advances in MATLAB at Electronics engineering Department SMVDU Kartra 20-29 October 2018.
35. One week FDP on Fundamentals of Fuzzy logic and Applications at Computer Engineering Department SMVDU Kartra 29-sept-04-October 2019.
36. Three day IEEE international conference on Image Information Processing and Application–ICIIP-2019 at JP university of Information Technology, Wakanaghat, Solan, HP-India from 15-17 November 2019.

PROJECTS COMPLETED/ONGOING

Name of Funding Agency	Title of Project	Total Amount (in Rs)	Duration	Financial status
University Grants Commission (UGC)	Design, Development and FPGA implementation of Novel Cryptographic Techniques	200,000.00	2 Years	Completed
PRISM (DST), Govt. of India	Design and development Smart Baby Cradle System	1,65,000.00	1 ½ years	Funds not Released
ICPS division DST, Govt. of India	Design and Development of Energy Efficient Millimeter wave Antennas for 5G Networks and IOT	6200,000.00	3 years	Ongoing
DST, Govt. of India	Design and development of novel watermarking algorithms for cultural multimedia	57,00,000.00	3 years	Ongoing

RESEARCH GUIDANCE

Ph.D. /M. Phil Awarded				
Name of Scholar	Program	Title of thesis	Role	Year of award
Mehboob ul Amin	Ph. D	Design Analysis and Implementation Techniques for Interference Mitigation and Pre-Coding in 4G LTE	Co-Supervisor	2018
Farhana Ahad	M.Phil.	Study of digital watermarking techniques for E-healthcare systems.	Supervisor	2016
Jahangir Ahmad Akhoun	M.Phil.	Study of Image Steganographic Techniques for Convert Communication.	Supervisor	2017
Sakeena Akhter	M.Phil.	Study of Various Speech Compression Techniques for Cellular Communication	Co-Supervisor	2016
Nazir Ahmed Loan	Ph. D	Design, Development and Implementation of Robust Image Watermarking Techniques for Copyright Protection	Supervisor	2019
Sakeena Akhter	Ph. D	Design of New Techniques for Low Bit error Rate Speech Coding in Wireless Environment with Special Reference to 5G Networks	Co-Supervisor	2019
Javaid A. Kaw	Ph. D	Development of high capacity data hiding techniques for secure communication	Co-Supervisor	2020

Nasir Nabi	Integ-Ph.D	Design and Implementation of Secure and Robust Water-marking Techniques for Simultaneous Image Processing and Geometrical Attacks	Supervisor	2020
Ongoing Research				
Solihah Gull	Integ-Ph.D	Development and Implementation of Novel Techniques for Authentication of Electronic Patient Record (EPR) for e-health applications	Supervisor	NA
Muzaffar Gani	Integ-Ph.D	Modelling and performance analysis of spintronic devices using 2D materials with application to digital logic	Supervisor	NA
Aiman Jan	Integ-Ph.D	Development of Multi-level security algorithms using steganography and chaotic encryption.	Supervisor	NA
Muzamil Hassan	Integ-Ph.D	Development and implementation of tamper detection and localization techniques for digital images	Supervisor	NA
Shahid Ahmad Malik	Integ-Ph.D	Development of efficient digital filters for ECG de-noising	Co-Supervisor	NA
M. Tech. Theses Degrees Supervised				
Name of Student	Program	Title of thesis	Year of award	
Shifa Showkat	M.Tech.	Development of a contrast stretching based reversible data hiding scheme with tamper detection capability	2019	
Ifra Afzal	M. Tech.	Secure Framework for Patient Data Transmission using Mobile- Cloud Platform.	2019	
Shah Haris Nabi	M. Tech.	Information Embedding using DNA sequences for covert communication	2019	
Nimar Habib	M. Tech.	Realization of an image encryption framework based on DNA substitution and chaotic theory.	2019	
Aaquib Reshi	M. Tech.	Image security using bit level progressive secret sharing	2019	
Asra Kamili	M.Tech.	Development of Dual Watermarking Framework for Industrial Image Authentication and Tamper Localization	2020	
Jahangir Ahmad	M. Tech.	Energy-Aware selective frame encryption for Secure Video Transmission	2020	
Murtaza Ali	M. Tech.	Fast Haze Removal using Modified Dark Channel Prior	2020	
Sana Ali	M. Tech.	Image Restoration for Underwater Autonomous Vehicle Applications	2020	

Nuzhat	M. Tech.	Efficient forgery detection algorithm using fragile Watermarking	2020
Shamsul Irfan	M. Tech.	High-Capacity Data Embedding in Adaptive Block Truncation Coded (ABTC) Images	2021
Shazia Akhtar	M. Tech.	Reversible Data Hiding in Encrypted Images (RDHEI) using Prediction Error (PE) and RC6 Encryption	2021
Munazah Lyle	M. Tech.	Development of Efficient Self-adaptive Selective Image Encryption Techniques	2021
Annayat Ullah Tantray	M. Tech.	Hybrid Image Encryption Using Chaos and DNA Based Cryptographic Technique	2021
Shaista Mansoor	M. Tech.	Adaptive Image Encryption based on Chaos and DNA Computing	2021
Arooj	M. Tech.	Reversible Data Hiding in Compressed Domain Using Zero-Point Fixed Histogram Shifting	2021

TPC MEMBERSHIP OF VARIOUS NATIONAL/ INTERNATIONAL EVENTS.

- Member TPC, Commune, 2015
- Member TPC, SEEDS, 2015
- Member TPC, SEEDS 2016
- Member TPC, SEEDS 2017
- Member, TPC, JKSC2018
- Member TPC, SEEDS 2018
- Member TPC, ICIP-2019
- Member TPC, ICIP-2021
- Member TPC, ASPI, Spain, 2021
- Member TPC, BIOMESIP, Spain 2021

SESSIONS CHAIRED AT NATIONAL /INTERNATIONAL CONFERENCES

- Organized and Chaired a Special session on “Use of Artificial Intelligence and Internet of Things in the Security of Healthcare and Biomedical Informatics” 2nd International Conference On Intelligent Engineering And Management- organized by Amity University LONDON (UK), April 28-30, 2021.
- Organized and Chaired a Special session on “e-healthcare data Analytics in Three day IEEE international conference on Image Information Processing and Application–ICIP-2019,
- Chaired a session in UGC sponsored National seminar on Electronic Devices , systems and Information Security 2018
- Chaired a session in 13th JK Science Congress with the theme of Signal and Image Processing, in the Section of Electronic Sciences.
- Chaired a session in UGC sponsored National seminar on Electronic Devices , systems and Information Security 2017
- Chaired a session in Three day IEEE international conference on Image Information Processing and Application–ICIP-2017
- Chaired a session in UGC sponsored National seminar on Electronic Devices , systems and Information Security 2016

- Chaired a session in 2015 International Conference on Advances in Computers, Communication, and Electronic Engineering Commune, 2015

INVITED TALKS

- Delivered an invited lecture at SSM college of Engineering and Technology on “Using images as secure data Carriers” on 26th May 2016.
- Delivered invited talk on “MATLAB for Mathematicians” at Central University of Kashmir, Nowgam Campus on 28 Nov, 2017.
- Delivered an invited talk on “Hiding in Plain Sight: A new paradigm for covert communication” at State Institute of Education on 22-03-2019.
- Delivered an invited talk on “Hiding clinical information in medical images for e-health applications” at National Institute of Technology, Srinagar, in TEQIP III sponsored one week short term course on ‘ Biomedical signal and image processing: Contemporary methods and Applications on 01-08-2019.
- Delivered an invited talk on “CBCS implementation issues on UG level” at GDC Kangan on 23-03-2020.
- Delivered an invited talk on “Security issues in Health 4.0 at GDC Sumbal on 26-03-2020.

MEMBERSHIP OF PROFESSIONAL SOCIETIES:

- Member, International Association of Engineers (**IAENG**), Hong Kong, China, Membership Number: 110662.
- Member Institute of Electrical and Electronics Engineers (**IEEE**), Membership Number 94515350
- Member Society of Digital Information and Wireless Communications, USA. Membership number:07569
- Member, European Alliance for Innovation, (**EAI**)
- Member Internet society UK-Chapter, Membership (Registration) number: 442872.
- Member Computer Science Teachers Association (**CSTA**), New York, USA. Membership number: 0944755.
- Member for affiliation of various hardware courses with NIELIT by Ministry of Communications and Information Technology, Govt. of India.
- **Junior Research Fellow**, University Grants Commission, India
- Member, expert committee RUSA for Electronics and Auto Electronics.

REVIEWING ACTIVITIES

- IEEE Transactions on Information Security and Forensics.
- IEEE transactions on Multimedia
- IEEE IOT Journal
- IEEE Transactions on Dependable and Secure Computing
- IEEE Access
- International Journal of Electronics (UK) , Taylor and Francis
- International Journal of Communication Systems (UK)
- International Journal of Science and Technology (Thailand)
- Computers and Electrical Engineering (UK), Elsevier
- Multimedia Tools and Applications, Springer.
- AEU-Journal of Electronics and Communications Elsevier.
- Journal of Healthcare Engineering, Hindawi publications.
- Soft computing , Elsevier
- 3D Research Elsevier.
- Int. J. of information and computer security, Inderscience.
- Computer Methods and Programmes in Biomedicine, Elsevier.
- Int. J. of information of Electronic security and digital forensics, Inderscience
- Int. J. of E-health and Medical communications, Inderscience

- International journal of Network Security (IJNS), (USA)
- Kuwait Journal of Science and Technology

COURSES TAUGHT AT UG AND PG LEVEL

- Multimedia Signal Coding
- Digital Image Processing
- Digital Signal Processing
- Simulation Tools
- Digital design using Hardware Description Languages(VHDL)
- Control System Engineering
- Network analysis and Synthesis
- Power Electronic Circuits and Systems
- Electronic Circuits
- Engineering Mathematics
- Simulation and Modeling using MATLAB

U.G AND P.G. PROJECTS COMPLETED

About fifty five UG and PG projects have been completed under my supervision. A few of them are mentioned below.

- Adaptive front light control for vehicles
- Arduino based power theft control and pre-paid billing system
- Design and Development of home appliance control using IR technology.
- Thermal imaging enhancing system for defense applications
- A novel image interpolation system for upscaling images
- High capacity data hiding in color images for covert communication.
- Design and Development of DTMF Remote control system for domestic and commercial Applications.
- Design and development Digital attendance system.
- Design and Development of Chaotic Spread Spectrum modulation for Secure data transmission
- Design and Development of Reliable, Secure and Efficient Real Time Signal Processing for Various Communications and Intercom Applications
- Design and Development of frequency modulation based FH-CDMA for multi-user, Multiple Access Communication Applications
- Design and Development of Simple Multi-Channel remote control system for domestic and commercial applications.
- Design and development and computer simulation of Multi-channel data encryption and Decryption system.
- Design and development of Mobile Phone controlled, remote control system, for domestic and commercial applications.
- ROI watermarking of Medical image for Telemedicine.
- A new approach for color image watermarking based on Luminance modulation
- Design and development of High capacity steganographic system using modular arithmetic.

ADDITIONAL PERSONAL INFORMATION

Permanent Address: Zazna, Ganderbal, Kashmir, (J&K)

Place of Birth: Zazna Ganderbal.

Dated: 31-06-2021