Curriculum Vitae



Dr. Sachin Kumar Gupta

(Associate Professor)

Department of Electronics & Communication Engineering

Under the mentorship

of

Indian Institute of Space Science and Technology (IIST) –
Indian Space Research Organization (ISRO),
Central University of Jammu, Samba-181143, (UT of J&K), India

(Former Doctoral Research & Research Fellow)

National Chio Tung University, Hsinchu, Taiwan. Indian Institute of Technology (BHU), Varanasi, India

Ph. No.: (+91) 9532105756, 7006623092

Email id: <u>sachin.ece@cujammu.ac.in</u>, <u>sachin.rs.eee@iitbhu.ac.in</u>, <u>sachin.gupta.eee09@iitbhu.ac.in</u>, sachin344@gmail.com

Research Links:

1. Google Scholar: https://scholar.google.co.in/citations?user=z5vDy6oAAAAJ&hl=en

2. Research Gate: https://www.researchgate.net/profile/Dr-Sachin-Gupta

3. Web of Science Researcher ID: JKI-7004-2023

4. Scopus Author ID: 57213337960

5. https://orcid.org/0000-0001-8270-5853

6. https://www.linkedin.com/in/dr-sachin-kumar-gupta-69551676/

Career Profile:

Dr. Sachin Kumar Gupta is currently working as an Associate Professor in the Department of Electronics and Communication Engineering (under the mentorship of Indian Institute of Space Science and Technology (IIST)-Indian Space Research Organization (ISRO)), Central University of Jammu, Samba-181143, Jammu (UT of J&K), India since 8th September 2023, He has received his B. Tech in Electronics and Telecommunication Engineering from National Institute of Technology, Raipur (Chhattisgarh), India in 2008 and M. Tech & Ph.D. with Specialization in Systems Engineering from Indian Institute of Technology (Banaras Hindu University), Varanasi (UP), India in 2011 & 2016, respectively. He was a former research fellow in the Mobile Computing and Broadband Networking Lab, Department of Computer Science, National Chiao Tung University, Hsinchu, Taiwan. He has also served as Assistant Professor in the School of Electronics and Communication Engineering, Shri Mata Vaishno Devi University, Kakryal, Katra, (J&K), India from 1st January 2015 to 7th September 2023. His research interest includes UAV/Drone Communication, Cryptography and Network Security, Wireless Networking, MANET, ITS, IoT, SDN, etc. He has published 120+ research articles in reputed international/national journals and prestigious conference proceedings, and an author of many book chapters as well. He has also edited a number of books in prestigious publication houses. He has organized several faculty development programs, short-term courses, workshops, conferences, etc. as coordinator and organizing secretary. Also, served as an organizing committee member, and session chair of the various workshops, seminars, and conferences. Moreover, he has delivered expert talks in the domain of cryptography and network security and networking/communication in many organizations. He is an associate editor and reviewer in various reputed journals and conferences. He is life member of the Institution of Electronics and Telecommunication Engineers (IETE), Indian Society for Technical Education (ISTE), Computer Society of India (CSI), Internet Society (ISOC), etc.

Research Interest:

To metamorphose my skills in real-world applications and to make a mark for myself in the arena of communication, networking, and security issues and their application accord to the current scenario of globalization.

& Education Background:

Ph.D. Systems Engineering, Indian Institute of Technology (BHU) Varanasi, India, 2016.

Ph.D. [Short-Term Research Work] Mobile Computing and Broadband Networking Lab (MBL), **National Chiao Tung University**, **Hsinchu**, Taiwan, (Republic of China), 2014.

M.Tech. Systems Engineering, Indian Institute of Technology (BHU) Varanasi, India, 2011.

B.Tech. Electronics and Telecommunication Engineering, National Institute of Technology Raipur, India, 2008.

Intermediate PCM, Saraswati Shishu Mandir School, RamanujGanj (C. G. Board), India, 2003.

Matriculation Science Stream, Govt. Boys H S School, RamanujGanj (M. P. Board), India, 2001.

Work Experiences:

Designation: Associate Professor (08/09/2023 to till date).

Organization: Department of Electronics and Communication Engineering, under the mentorship of IIST-ISRO, Central University of Jammu, Samba-181143, (UT of J&K), India.

Designation: Assistant Professor (01/01/2015 to 07/09/2023), (8 Years, 8 Months and 7 Days).

Organization: School of Electronics and Communication Engineering, Shri Mata Vaishno Devi University, Kakryal, Katra-182320, Jammu, (UT of J&K), India.

Designation: Assistant Professor (07/09/2011 to 06/08/2012), (11 Months).

Organization: Department of Electronics and Communication Engineering/ Electrical Engineering at Pratap University Jaipur, Rajasthan, India.

Achievements/Awards:

- ➤ Secured 1st Rank in Ph.D. course work with 9.5 CGPA at IIT (BHU), Varanasi.
- Awarded **2014** NCTU Taiwan Elite Internship Scholarship for Ph.D. Short Term Research Work, Mobile Computing and Broadband Networking Lab, NCTU, Hsinchu, Taiwan.
- > Awarded Two Times **MHRD Fellowship** for pursuing M. Tech and Ph. D., respectively.
- ➤ Qualified GATE 2009 & 2012 in Electronics and Communication Engineering.

Guided Ph.D. Thesis:

- Amina Khan (17dec001) "Optimized Self Configurable UAV-Assisted Network for Disaster Management" (Awarded on 04/03/2023).
- ➤ Akshita Gupta (19dec002) "Collaboration of UAVs and Fog Computing for better QoS" on going, Since August 2019 (Thesis Submitted).
- ➤ Itika (22dec001) "IRS-based Drone Communication Systems for Emergency Situations", ongoing, Since November 2022.

Guided M. Tech Dissertations (15):

- ➤ Harneet Kour (21mmc005), "Mars Surface Exploration: UAV-Based Monitoring for Improved Path Trajectory", 2023.
- > Sumia Maqsood (21mmc011), "Physical Unclonable Function-based Authentication Scheme for UAV Communication", 2023.
- > Ayushe (20mmc002), "SUAVs-FL: SECURE UAVs USING FL", 2022.
- ➤ Itika (20mmc020), "SFL vs AFL UAVs: A Comparative Analysis" 2022.
- Manjula Shrama (19mmc005), "Mars Exploration through Unmanned Aerial Vehicle", 2021.
- Farheen Syed (18mmc006), "LSB-XOR Technique for Securing Images in UAVs for Disaster Applications", 2020.

- > Susmita Mondal (18mmc017), "Blockchain-Based Decentralized Electronic Healthcare Record Management System", 2020.
- Mehak Shafi (18mmc010), "Secure Blockchain Based OBD Framework for Vehicles in Intelligent Transportation System", 2020.
- Diwankshi Sharma (17mmc003), "A Secure Functional Encryption Scheme for UAV Integrated HetNet", 2019.
- > Aabid Rashid (17mmc001), "IBE-Based Authentication Scheme for UAV Embedded Heterogeneous Networks", 2019.
- > Tufail Ahmad Lone (17mmc017), "Attribute-Based Authentication Scheme in HetNets for Medical Applications", 2019.
- Akshita Gupta (16mmc002), "Enhancing Capacity in Wireless HetNet by Assisting UAVs", 2018.
- > Shriya Sundhan (16mmc015), "Comparative Performance Evaluation of Random Heterogeneous Network: with and without UAVs", 2018.
- > Essar Farooq (15mmc006), "Comparative Performance Analysis of Terrestrial and Intersatellite FSO SISO link for Different Modulation Schemes", 2017.
- > Reeta Devi (14mmc016), "Physical Layer Security in Next Generation Networks", 2016.

Guided B. Tech Projects:

➤ Completed: 70

Abroad Visit for Academic Purposes:

Bangkok, Thailand: IEEE 3rd International Symposium on Instrumentation, Control, Artificial Intelligence, and Robotics (ICA-SYMP 2023), Faculty of Engineering, Kasetsart University, Bangkok, Thailand, January 2023.

Male, Maldives: IEEE 2nd International Conference on Electrical, Computer, Communications and Mechatronics Engineering (ICECCME 2022), Maldives National University, Maldives, Nov. 2022.

Cambridge, **United Kingdom:** 21st International Conference on Computer Modelling and Simulation, (UKSim2019), Cambridge University (Emmanuel College), March 2019.

Bali, Indonesia: Academic Visit, December 2017.

International Institute of Engineers (IIE), Kuala Lumpur, (Malaysia) 6th International Conference on Advances in Engineering Sciences and Applied Mathematics (ICAESAM), December 2016.

University of Peradeniya, Sri Lanka: IEEE 10th International Conference on Industrial and Information Systems (ICIIS), December 2015.

National Chiao Tung University, Hsinchu, Taiwan, (Republic of China): Experimental Research Work, Mobile Computing and Broadband Networking Lab (MBL), 2014.

Manchester, United Kingdom: European Modelling Symposium (EMS), IEEE Computer Society, November 2013.

Publications:

Ψ Publications: Patent, Book/Book Chapters, International/National Journals, and Conferences:

PATENTS:

- A Modified Heat Sink Device, Republic of South Africa. (Grant Number: 2022/12000) on dated 29/03/2023.
- > System and a Method for Neutralization of Nuclear Bombs Using Ultra-High Energy Neutrino Beam, Republic of South Africa (Grant Number: 2023/01208) on dated 31/05/2023.
- A System for UAV-Based Fog Computing for Smart Cities, (IPC-H04W 84/06, Case number DE: 202022104978), Filling Date: 03/09/2022, Published Date: 05/10/2022, German patent and trademark office.
- A self-guided cane for visually impaired people, (IPC-A61H 3/06, Case number DE: 202022106164), Filling Date: 03/11/2022, Published Date: 12/12/2022, German patent and trademark office.

- An Individual-Privacy-Protection System and Method in Public Monitoring and Surveillances, (Application Number: 202211048641) Filling Date: 25/08/2022, Published Date: 02/09/2022, Intellectual Property, Office of the Controller General of Patents Designs & Trade Marks, GoI.
- ➤ Automated System for Monitoring the Cleaning Membrane of a Water Purifier, (IPC-G07C 3/00, Case number DE: 20 2021 105 682.7), Filling Date: 18/10/2021, Published Date: 02/12/2021, German patent and trademark office.
- ➤ Secured Data Transmission Using Green Computing in Wireless Sensor Network, (Application Number: 202141043255) Filling Date: 23/09/2021, Published Date: 01/10/2021, Intellectual Property, Office of the Controller General of Patents Designs & Trade Marks, GoI.

EDITED BOOKS:

- Editors: Vijay Kumar Sharma, Sachin Kumar Gupta, "High-Performance Automation Methods for Computational Intelligent Systems" CRC Press, Taylor and Francis Group indexed by Scopus (going on).
- Editors: Sachin Kumar Gupta, Santosh Kumar, Ashutosh Mishra, Keshav Kaushik, Taskeen Zaidi, Adarsh Kumar "Intelligent and Sustainable Internet of Things: New Frontiers for Next-Generation Smart Systems," Bentham Science Publishers Pte. Ltd (going on).
- ➤ Editors: Pawan Singh, Sudesh Kumar, Sachin Kumar Gupta, Abhay Kumar Rai, Abdu Saif, "Wireless Ad-hoc and Sensor Networks: Architecture, Protocols, and Applications," CRC Press, Taylor and Francis Group indexed by Scopus (going on).
- ➤ Editors: Pawan Singh, Sudesh Kumar, Sachin Kumar Gupta, Abhay Kumar Rai, Abdu Saif, "Wireless Ad-hoc and Sensor Networks: Architecture, Protocols, and Applications," CRC Press, Taylor and Francis Group indexed by Scopus (going on).
- Editors: Sachin Kumar Gupta, Manoj Kumar, Anand Nayyar, Shubham Mahajan, "Emerging Technologies and Trends in Next Generation Transportations and Unmanned Aircraft Systems", Wiley-Scrivener imprint and will be indexed by Scopus and offered to Web of Science (going on).
- Editors: Omprakash Kaiwartya, Keshav Kaushik, **Sachin Kumar Gupta**, Ashutosh Mishra, Manoj Kumar, "**Security and Privacy in Cyberspace**," Springer Nature; 1st ed. 2022 edition (Aug. 20 2022), ISBN-10: 9811919593, ISBN-13: 978-9811919596. pp: 1-226.

SPECIAL ISSUE CALL:

➤ Guest Editors: Abhishek Gupta, Omprakash Kaiwartya, Shailendra Singh Rana, S. H. Alsamhi, **Sachin Kumar Gupta**, for Special issue call on "Computational Methods for 3D Dental Images (CMDI)", Wiley, (SCI, Impact factor: 2.587) https://onlinelibrary.wiley.com/journal/14680394.

SCI/SCIE/SSCI

- ➤ Itika Sharma, Sachin Kumar Gupta*, "SFL-MDrone: Synchronous Federated Learning Enabled Multi Drones", Journal of Intelligent & Fuzzy Systems, 00(00), 00-00, 2023, (SCIE, IF= 2.0) (Accepted).
- ➤ Itika Sharma, Sachin Kumar Gupta*, "Channel Tracking in IRS-based UAV Communication Systems using Federated Learning", Journal of Electrical Engineering, 74(06), 521-531, 2023, (SCIE, IF= 0.8). doi.org/10.2478/jee-2023-0060
- Madhumitha Kulandaivel, Ganesh Kumar, V. Sathiyamoorthi, Sachin Kumar Gupta*, "A Novel Sensitive DDoS Attacks against Statistical Test in Network Traffic Fusion", Transactions on Emerging Telecommunications Technologies, Wiley, 34(12), 01-19, 2023, 10.1002/ett.4867, (SCIE, IF= 3.6).
- Subhankar Ghosh, Anuradha Banerjee, Abu Sufian, **Sachin Kumar Gupta***, S.H. Alsamhi, Abdu Saif, "**Efficient Selfish Node Detection using SVM in IoT-MANET Environment**," Transactions on Emerging Telecommunications Technologies, Wiley, 34(12), 01-24, 2023. 10.1002/ett.4858, (SCIE, IF= 3.6).
- ➤ Chukhu Chunka, Subhasish Banerjee, Sachin Kumar Gupta*, "A secure communication using multifactor authentication and key agreement techniques in internet of medical things for COVID-19 patients", Concurrency and Computation: Practice and Experience, Wiley, 35(7), 01-22, 2023, https://doi.org/10.1002/cpe.7602, (SCIE, IF=2.0).

- ➤ Poonam Yadav, Shashank Yadav, Ashutosh Srivastava, **Sachin Kumar Gupta**, Radha Raman Chandan, Bireshwar Dass Mazumdar, Nitin Goyal, "**Sensor Injection Based Routing Protocol for Effective Load Balancing in Underwater Wireless Sensor Networks**", Wireless Personal Communications, Springer, 1-29, 2023, 10.1007/s11277-023-10799-1. (SCIE, IF=2.2).
- ➤ Khushboo Jain, Keshav Kaushik, **Sachin Kumar Gupta**, Shubham Mahajan, Seifedine Kadry, "**Machine learning-based predictive modelling for the enhancement of wine quality**", Scientific Reports 13, 17042 (2023). https://doi.org/10.1038/s41598-023-44111-9 (SCIE, IF=4.6).
- Anuradha Banerjee, **Sachin Kumar Gupta***, Parul Gupta, Abu Sufian, Ashutosh Srivastava, Manoj Kumar, "**UAV-IoT Collaboration: Energy and Time-Saving Task Scheduling Scheme**", International Journal of Communication Systems, Wiley, 36(14), 1-24, 2023, (SCIE, IF=2.1) https://doi.org/10.1002/dac.5555
- Ashutosh Mishra, Sachin Kumar Gupta*, "Intelligent Classification of Coal Seams Using Spontaneous Combustion Susceptibility in IoT Paradigm", International Journal of Coal Preparation and Utilization, Taylor & Francis, 1-23, 2023, (SCIE, IF=2.791) 10.1080/19392699.2023.2217747.
- Anuradha Banerjee, Abu Sufian, Ashutosh Srivastava, **Sachin Kumar Gupta**, Saru Kumari, Sachin Kumar, "**An Energy and Time-Saving Task Scheduling Algorithm for UAV-IoT Collaborative System**," Microprocessors and Microsystems, Elsevier, 2023, doi.org/10.1016/j.micpro.2023.104875 (SCI, IF=3.503).
- ➤ Vinay Pathak, Karan Singh, Radha Raman Chandan, **Sachin Kumar Gupta***, Manoj Kumar, Shashi Bhushan, Sujith Jayaprakash, "**Efficient Compression Sensing Mechanism based WBAN System**", Security and Communication Networks, Hindawi, 2023, Article ID 8468745, 1-12 https://doi.org/10.1155/2023/8468745 (SCIE, IF=1.968).
- Santosh Kumar, Mithileh Kr. Chaube, S. H. Alsamhi, Sachin Kr Gupta, Mohsen Guizani, Raffaele Gravina, Giancarlo Fortino, "A Novel Multimodal Fusion Framework for Early Diagnosis and Accurate Classification of COVID-19 Patients Using X-ray Images and Speech Signal Processing Techniques," Computer Methods and Programs in Biomedicine, Elsevier, 226 (2022), 107109, pp: 1-13, https://doi.org/10.1016/j.cmpb.2022.107109, (IF=7.027, SCI).
- Santosh Kumar, Rishab Nagar, Saumya Bhatnagar, Ramesh Vaddi, Sachin Kr Gupta, Mamoon Rashid, Ali Kashif Bashir, Tamim Alkhalifah, "Chest X Ray and Cough Sample based Deep Learning Framework for Accurate Diagnosis of COVID-19", Computers and Electrical Engineering, Elsevier, 103 (2022), 108391, https://doi.org/10.1016/j.compeleceng.2022.108391, (SCIE, IF=4.152).
- Aabid Rashid, Sachin Kr Gupta, Zeba Khanam, Mamoon Rashid, Sultan S. Alshamrani, Ahmed Saeed AlGhamdi, "A Novel Approach for Securing Data against Adversary Attacks in UAV Embedded HetNet using Identity Based Authentication Scheme", IET Intelligent Transport Systems, Wiley, 1-19, 2022, https://doi.org/10.1049/itr2.12271, (SCIE, IF=2.7).
- Santosh Kumar, Sachin Kr Gupta, Vinit Kumar, Manoj Kumar, Mithilesh Kr Chaube, N. Srinivas Naik, "Ensemble Multimodal Deep Learning for Early Diagnosis and Accurate Classification of COVID-19", Computers and Electrical Engineering, Elsevier, 103 (2022), 108396, pp: 1-18, 10.1016/j.compeleceng.2022.108396 (SCIE, IF=4.3).
- ➤ Keshav Kaushik, Akashdeep Bhardwaj, Manoj Kumar, **Sachin Kr Gupta***, Abhishek Gupta, "**A Novel Machine Learning-Based Framework for Detecting Fake Instagram Profiles,**" Concurrency and Computation: Practice and Experience, Wiley, 34(28), 01-12, 2022, https://doi.org/10.1002/cpe.7349, (SCIE, IF=2).
- Vijesh Bhagat, Santosh Kumar, Sachin Kr Gupta*, Mithilesh Kr Chaube, "Lightweight Cryptographic Algorithms Based on Different Model Architectures: A Systematic Review and Futuristic Applications," Concurrency and Computation: Practice and Experience, Wiley, 35(1), pp: 01-27, 2022, https://doi.org/10.1002/cpe.7425, (SCIE, IF=2).
- Akshita Gupta, Sachin Kr Gupta*, "A Survey on Green UAV-based Fog Computing: Challenges and Future Perspective", Transactions on Emerging Telecommunications Technologies, Wiley, 33(11), pp. 01-29, 2022. 10.1002/ett.4603, (SCIE, IF= 3.6).
- Madhumitha Kulandaivel, Arulanand Natarajan, Sathiyamoorthi Velayutham, Ashutosh Srivastava, Sachin Kumar Gupta, Suresh P, Nitin Goyal, "Compressive Sensing Node Localization Method using Autonomous Underwater Vehicle Network", Wireless Personal Communications, Springer, pp. 1-19, 2022. (SCIE=2.2), https://doi.org/10.1007/s11277-022-09841-5

- Manni Kumar, Nitin Goyal, Ramy Mohammed Aiesh Qaisi, Mohd Najim, Sachin Kumar Gupta, "Game Theory based Hybrid Localization Technique for Underwater Wireless Sensor Networks," Transactions on Emerging Telecommunications Technologies, Wiley, 33(11), pp. 01-23, 2022. doi:org/10.1002/ett.4432, (SCIE, IF= 3.6).
- Akshita Gupta, Sachin Kr Gupta* "Flying through the Secure Fog: A Complete Study on UAV-Fog in Heterogeneous Networks", International Journal of Communication Systems, Wiley, 35(13), pp. 1-41, 2022, https://doi.org/10.1002/dac.5237, (SCIE, IF=2.1).
- ➤ Roopashree S, Anitha J, Sathiyamoorthi V, B Aruna Devi, Ashutosh Srivastava, Sachin Kr. Gupta, Manoj Kumar, "An IoT and Machine Learning based Intelligent System for the Classification of Therapeutic Plants", Neural Processing Letters, Springer, 1-29, 2022, DOI: 10.1007/s11063-022-10818-5, (SCIE, IF=3.1).
- Amina Khan, Sumeet Gupta, Sachin Kr. Gupta*, "Emerging UAV Technology for Disaster Detection, Mitigation, Response, and Preparedness" Journal of Field Robotics, Wiley, 39(6), pp. 905–955, 2022 https://doi.org/10.1002/rob.22075 (SCI, IF=8.3).
- Amina Khan, Sumeet Gupta, Sachin Kr. Gupta*, "Multi-UAV Integrated HetNet for Maximum Coverage in Disaster Management" Journal of Electrical Engineering, 73(2), pp. 116-123, 2022, (SCIE, IF=0.840).
- Alok Aggarwal, Madam Chakradar, Manpreet Singh Bhatia, Manoj Kumar, Thompson Stephan, **Sachin Kr. Gupta**, S. H. Alsamhi, Hatem AL-Dois, "COVID-19 Risk Prediction for Diabetic PatientsUsing Fuzzy Inference System and Machine Learning Approaches", Journal of Healthcare Engineering, Hindawi, Vol. 2022, ID 4096950, pp: 1-10, https://doi.org/10.1155/2022/4096950 (SCIE, IF= 3.822).
- ➤ Santosh Kumar, Mithilesh Kumar Chaube, Srinivas Naik Nenavath, **Sachin Kr. Gupta***, Sumit Kumar Tetarave, "**Privacy Preservation and Security Challenges: A New Frontier Multimodal Machine Learning Research**", International Journal of Sensor Networks, Inderscience, 39(4), 227-245, 2022, (SCIE, IF=1.1).
- ➤ Manjula Sharma, Akshita Gupta, **Sachin Kr. Gupta**, Saeed Hamood Alsamhi, Alexey V. Shvetsov "**Survey on Unmanned Aerial Vehicle for Mars Exploration: Deployment Use Case**," Drones, MDPI, 6(1:4), 1-23, 2022. https://doi.org/10.3390/drones6010004, (SCIE, IF=5.532).
- Anuradha Banerjee, Abu Sufian, Krishna Keshob Paul, Sachin Kr Gupta*, "EDTP: Energy and Delay Optimized Trajectory Planning for UAV-IoT Environment", Computer Networks, Elsevier, 202(2022), pp. 1-17, 108623, https://doi.org/10.1016/j.comnet.2021.108623, (SCI, IF=5.6).
- ➤ Vinod Kumar, Vinay Pathak, Neelendra Badal, Purnendu Shekhar Pandey, Rajesh Mishra, **Sachin Kr. Gupta***, "Complex Entropy based Encryption and Decryption Technique for Securing Medical Images", Multimedia Tools and Applications, An International Journal, Springer, pp:1-19, 2022, (SCIE, IF=3.6). https://doi.org/10.1007/s11042-022-13546-z
- > Subhankar Ghosh, Anuradha Banerjee, Abu Sufian, Sachin Kr. Gupta*, "Autoregressive Moving Average based Anycast with Support Vector Machine Clustering in Mobile Ad-Hoc Networks," Transactions on Emerging Telecommunications Technologies, Wiley, 33(4), pp: 1-21, 2021. 10.1002/ett.4432, (SCIE, IF= 3.310).
- S. H. Alsamhi, Faris A. Almalki, Hatem AL-Dois, Alexey V. S., M. S. Ansari, A. Hawbani, **Sachin Kr. Gupta**, Brian Lee, "**Multi-Drone Edge Intelligence and SAR Smart Wearable Devices for Emergency Communication**," Wireless Communications and Mobile Computing, Hindawi, Wiley, Volume 2021, Article ID 6710074, 1-12, https://doi.org/10.1155/2021/6710074 (SCIE, IF=2.146).
- Amina Khan, Sumeet Gupta, Sachin Kr Gupta*, "Unmanned aerial vehicle-enabled layered architecture-based solution for disaster management," Transactions on Emerging Telecommunications Technologies, Wiley, 32(12), pp: 1-29, 2021. 10.1002/ett.4370, (SCIE, IF= 3.310).
- ➤ Vrince Vimal, Kamred Udham Singh, Abhishek Kumar, Sachin Kr Gupta, Mamoon Rashid, R.K. Saket, P. Sanjeevikumar, "Clustering Isolated Nodes to Enhance Networks Life Time of WSNs for IoT Applications", IEEE Systems Journal, 15(4), 5654 –5663, 2021, 10.1109/JSYST.2021.3103696, (SCIE, IF=4.4).
- Arun Kumar, Sharad Sharma, Nitin Goyal, **Sachin Kr. Gupta***, Saru Kumari, Sachin Kumar, "**Energy Efficient Fog Computing in Internet of Things based on Routing Protocol for Low Power and Lossy Network with Contiki**," International Journal of Communication Systems, Wiley, 35(4), pp: 1-21, 2021, doi.org/10.1002/dac.5049, (SCIE, IF=1.882).

- Nishant Jha, Deepak Prashar, Mamoon Rashid, Sachin Kr. Gupta, R. K. Saket, "Electricity Load Forecasting and Feature Extraction in Smart Grid Using Neural Networks", Computers & Electrical Engineering, Elsevier, 96 (2021), Part A, 107479, pp: 1-12, (SCIE, IF=4.3). https://doi.org/10.1016/j.compeleceng.2021.107479
- Ashutosh Srivastava, **Sachin Kr Gupta***, Mohd Najim, Nitesh Sahu, Geetika Aggarwal, Bireshwar Dass Mazumdar, "**DSSAM: Digitally Signed Secure Acknowledgement Method for Mobile Ad-hoc Network**" EURASIP Journal on Wireless Communications and Networking, Springer, 2021, 12 (2021), pp. 1-29, (SCIE, IF=2.559) https://doi.org/10.1186/s13638-021-01894-7
- ➤ V. D. Ambeth Kumar, S. Sharmila, Abhishek Kumar, A. K. Bashir, Mamoon Rashid, Sachin Kr Gupta, Waleed S. Alnumay, "A Novel Solution for Finding Postpartum Haemorrhage using Fuzzy Neural Techniques" Neural Computing and Applications, Springer, pp. 1-14, 2021 (SCI, IF=6). https://doi.org/10.1007/s00521-020-05683-z
- Farheen Syed, Sachin Kr Gupta*, S. H. Alsamhi, Mamoon Rashid, Xuan Liu, "A survey on recent optimal techniques for securing unmanned aerial vehicles applications", Transactions on Emerging Telecommunications Technologies, Wiley, 32(7), pp. 1-34, 2020. doi.org/10.1002/ett.4133 (SCIE, IF= 3.310).
- Diwankshi Sharma, Sachin Kr Gupta*, Aabid Rashid, Sumeet Gupta, Mamoon Rashid, Ashutosh Srivastava "A novel approach for securing data against intrusion attacks in unmanned aerial vehicles integrated heterogeneous network using functional encryption technique", Transactions on Emerging Telecommunications Technologies, Wiley, 32(7) pp: 1-32, 2020. doi.org/10.1002/ett.4114 (SCIE, IF= 3.310)
- Akshita Gupta, Sachin Kr Gupta*, Mamoon Rashid, Amina Khan, Manisha Manjul "Unmanned aerial vehicles integrated HetNet for smart dense urban area", Transactions on Emerging Telecommunications Technologies, Wiley, 33(10), pp: 1-22, 2020. https://doi.org/10.1002/ett.4123 (SCIE, IF= 3.310)
- ➤ V. D. Ambeth Kumar, Abhishek Kumar, Ranbir Singh Batth, Mamoon Rashid, Sachin Kr Gupta*, R. Manish, "Efficient Data Transfer in Edge Envisioned Environment using Artificial Intelligence based Edge Node Algorithm", Transactions on Emerging Telecommunications Technologies, Wiley, 32(6), pp: 1-15, 2020, https://doi.org/10.1002/ett.4110 (SCIE, IF= 3.310)
- ➤ Tufail A. Lone, Aabid Rashid, Sumeet Gupta, **Sachin Kr. Gupta***, Duggirala Srinivasa Rao, Mohd Najim, Ashutosh Srivastava, Abhishek Kumar, Lokendra Singh Umrao, Achintya Singhal, "**Securing Communication by Attribute Based Authentication in HetNet used for Medical Applications**," EURASIP Journal on Wireless Communications and Networking, Springer, 146 (2020), pp: 1-21, 10.1186/s13638-020-01759-5 (SCIE, IF=2.6).
- Amina Khan, Sumeet Gupta, Sachin Kr. Gupta*, "Multi-hazard Disaster Studies: Monitoring, Detection, Recovery, and Management, based on Emerging Technologies and Optimal Techniques", International Journal of Disaster Risk Reduction, Elsevier, 47 (2020), pp: 1-34, 101642, (SCIE, IF=5), https://doi.org/10.1016/j.ijdrr.2020.101642
- ➤ Saeed Mohammed, Ou Ma, Samar Ansari, **Sachin Kr. Gupta**, "Collaboration of Drone and Internet of Public Safety Things in Smart Cities: An Overview of QoS and Network Performance Optimization", Drones, MDPI, 3(1), 1-18, 2019. https://doi.org/10.3390/drones3010013. (SCIE, IF=5.532).
- ➤ Saeed H. Alsamhi, Ou Ma, M. Samar Ansari, **Sachin Kr. Gupta** "Tethered Balloon Technology in Design Solutions for Rescue and Relief Team of Emergency Communication Services", Disaster Medicine And Public Health Preparedness, Cambridge University Press, Vol. 13, No. 2, pp. 203-210, 2019. (SCIE, IF=5.556), 10.1017/dmp.2018.19
- ➤ Sachin Kr. Gupta, Rohit Sharma, R. K. Saket, "Effect of variation in active route timeout and delete period constant on the performance of AODV protocol", International Journal of Mobile Communications (IJMC), England, Inderscience publishers (UK), ISSN online: 1741-5217, ISSN print: 1470-949X, pp. 177-191, Vol. 12, No. 2, 2014 (SSCI, IF =1.522). 10.1504/IJMC.2014.059737.

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- ➤ Sachin Kr Gupta, Rohit Sharma, R. K. Saket, Ravi Prakash Diwedi, "Simulation and analysis of reactive protocol around default values of route maintenance parameters via NS-3", International Conference on Information Systems and Computer Networks, Mathura, pp. 155-160, 9-10 Mar 2013.
- ➤ Sachin Kumar Gupta and R. K. Saket, "Communication between the mobile nodes using DSDV and AODV Routing Protocols in MANETs using NS-2", National Conference on Advances in Electrical & Electronics Engineering, Indore, pp. 43-45, Feb 2011.

Expert Lectures:

- ➤ Delivered expert talks on "Innovation in Security Domain for Healthcare", Innovation in Healthcare Technology, JNPS Oxyloy Pvt Ltd, 18/02/2023.
- Delivered expert talks on "UAV Assisted Ground Network for Smart Cities: Challenges & Perspective" in International Conference on Role of Science Education & Technology in Making India Self-Reliant & Globally Competent (ICR-SET-2023) at St. Aloysius' Institute of Technology, Jabalpur 03rd -04th March 2023.
- ➤ Delivered expert talks on "UAV: Fundamental, Communication Models, Applications, and Future Perspective" & "UAV's Security Threats and its Counter Measurement", in 03 Days Workshop on "Drone Threats Strategies to Deal With", at Sher-I-Kashmir Police Academy, Udhampur, (J&K), UT, 29-31 March 2022.
- ➤ Delivered an expert talk on "UAV Assisted Network and its Security Issues & Challenges", one-week FDP on "Intelligent Computing and Communications" organized by Banasthali Vidyapith, Rajasthan, and supported by the Department of Science and Technology (DST), GoI under the scheme Consolidation of University Research for Innovation and Excellence in Women (CURIE), March 21-26, 2022.

- ➤ Delivered an expert talk on "Use of IoT Based Technology in Healthcare," Innovation in Healthcare Technology, organized by JNPS Oxyjoy Pvt Ltd, a start-up incubated at AIC-MFIE-IM-BHU, from 1st March 2021 to 6th March 2021.
- Acted as session chair and presented a talk on "**Drone for Public Safety**" in the 2nd International Conference on Networks and Cryptology (NetCrypt), organized by School of Computer and Systems Sciences, JNU, New Delhi, India on 4 to 6 December, 2020.
- > Delivered invited talk on "Networking Simulation Software: QualNet" during FDP on Energy Simulation from 4-8 November 2019, School of Energy management, SMVD University, Katra (J&K).
- ➤ Delivered expert lecture on "Network Security and Cryptography" in the Department of Computer Science and Engineering, SRM Institute of Science and Technology, Delhi-NCR on 28th January 2019.
- ➤ Invited Speaker on National Conference on "Innovation in Wireless Communication & Networking Technology" organized by Regional College for Education Research & Technology, Jaipur (Rajasthan) Association with the Institution of Engineers (India), from 18-19, April 2014.
- Organized: FDPs, Workshops, Session & Technical Chaired/Organizing Committee Members/ Mentor for NPTEL Certification Course:
- ➤ Session Chair: In Technical Session: Communication Engineering & Cyber Security, 8th International Conference on Microelectronics, Computing & Communication Systems (MCCS-2023), BIT Meshra, Ranchi, India, 29-30th July 2023.
- Coordinator, Training Programme on Cyber Jaagrookta in Nearby Villages of SMVVD University, katra, 7th June 2023.
- ➤ Online Workshop Coordinator, One week Workshop on "Blockchain and Cryptocurrencies" from 22-26 May, 2023.
- > Session Chair: 3rd International Conference on Nanoelectronics, Machine Learning, Internet of Things & Computing Systems (NMIC-2023), Ranchi, India, 29-30, April. 2023.
- Session Chair: IEEE 2nd International Conference on Electrical, Computer, Communications and Mechatronics Engineering (ICECCME), Maldives National University, Maldives, 16-18, Nov. 2022.
- ➤ Bagged Elite Certificate with 78.00% & Placed in Top 2% in the NPTEL MOOC Course on "Analog Communication", 12 weeks course (25/07/2022 to 14/10/2022), only 137 candidates qualified for the certificate.
- Workshop Co-coordinator, 03 Days Workshop on "Drone Threats Strategies to Deal With", at Sher-I-Kashmir Police Academy, Udhampur, (J&K), UT, 29-31 March 2022.
- ➤ Online Workshop Co-coordinator, One Day Workshop on "**Technology & Society**", 24th September, 2021, Faculty Development Centre, Shri Mata Vaishno Devi University, Katra (J & K).
- ➤ Online STC Coordinator, One Week Short Term Course (STC) on "Entrepreneurship: A Way of Thinking" from 28th September 2020 to 2nd October 2020.
- Conference Secretary, TEQIP-III sponsored Two Days International Conference on "Advancement in Engineering Sciences (AES2019)" from 28-29 September, 2019.
- ➤ Workshop Coordinator, TEQIP-III sponsored One-week National Workshop on "AWS Cloud Technology" from 07-11 September, 2019.
- Session Chair: International Conference on Networks and Cryptology (NetCrypt), JNU, 14-16 June 2019.
- ➤ Workshop Coordinator, TEQIP-III sponsored One-week National Workshop on "Scientific Learning with Python" from 25-29 May, 2019
- ➤ Workshop Coordinator, TEQIP-III sponsored One week Workshop on "Modeling & Simulation in Ultra Low Power VLSI Design" from 18-22 May 2019.
- STC Coordinator, TEQIP-III sponsored One-week Short Term Course on "Advanced Techniques in Next Generation Network with focused on 5G, IoT and Aerially Controlled HETNET" from 16-20th December 2018.
- Central Coordinator, TEQIP-III sponsored One-week Hands-on Training on "Open-Source Software Linux (Ubantu) and LibreOffice" from 26-30th November 2018, organized in collaboration with IIT Bombay Spoken Tutorial (MHRD) and Shri Mata Vaishno Devi University, Katra (J & K).

- ▶ Bagged Elite Certificate with 65.00% & Placed in Top 5% in the NPTEL MOOC Course on "Computer Networks and Internet Protocol", 12 weeks course (30/07/2018 to 28/10/2018), only 686 candidates qualified for the certificate.
- Session and Technical Chair, 5th Int. Con. on Recent Trends and Advancement in Engg. & Tech., Sponsored by SMVDU-TBIC & TEQIP-III, Oct. 25-26th, 2018.
- ➤ **FDP coordinator,** TEQIP-III sponsored One week Faculty Development Program on "Emerging Issues in VLSI Design" from 7th May to 11th May 2018.
- ➤ Bagged Elite+Gold Certificate with 90.25% & Placed in Top 2% in the NPTEL MOOC Course on "Cryptography and Network Security", 12 weeks course (22/01/2018 to 28/04/2018), only 19 candidates qualified for Elite+Gold certificate out of 13,495 registered candidates.
- Floated the **NPTEL Certification Course** at PG Level, Cryptography and Network Security, From 22nd Jan. 2018 to 13th April 2018 (12 weeks course).
- **Session and Technical Chair,** 4th Int. Con. on Recent Trends and Advancement in Engg. & Tech.", Sponsored by SMVDU-TBIC & TEQIP-III, Nov. 03-04th, 2017.
- Expert lecture coordinator, delivered by Dr. S. H. Alsamhi, Aerospace School, Tsinghua University, Beijing, China on "Greening Internet of things and Smart Everything with A Green-Environment Life", Aug. 28th, 2017.
- Workshop coordinator, for 1-Day UGC-Sponsored Workshop on "Scientific Writing using LaTeX", Feb. 24th, 2017.
- ➤ Organizing committee member of UGC- sponsored 2 day workshop on "Numerical Analysis in VLSI CAD using MATLAB and SIMULINK", at SMVDU, Jan. 14-15th, 2017.
- ➤ **Organizing committee member** of UGC- sponsored 2-day workshop on "Ultra Low Power for Biosensors and Implantable Microsystems", at SMVDU Dec. 2-3rd, 2016.
- **Session and Technical Chair,** 3rd International Conference on Recent Trends and Advancement in Engg. & Tech., SMVDU, Nov. 17-18th, 2016.
- ➤ Session Chair, 2nd International Conference on Recent Trends and Advancement in Engg. & Tech., SMVDU, Feb. 22nd, 2015.
- Coordinator: to conduct the online examination for 14th outreach Program, March 20th, 2015 conducted by 'Indian Institute of Remote Sensing (IIRS) Dehradun, Indian Space Research Organization (ISRO)', Department of Space, GoI.
- Expert Lecture Coordinator: delivered by Prof. Ramesh Bansal, HoD of Electrical, Electronic and Computer Engineering, from University of Pretoria, South Africa on "Smart Grid Features in Conventional and Renewable Power Systems", Jan. 14th 2015.

Short Term/Refresher/Orientation Course Attended:

- Attended five days' online workshop on "Artificial Intelligence & Computational Imaging in Healthcare", organized under 'CSIR Integrated Skill Initiative' Programme by CSIR- Central Scientific Instruments Organization (CSIR-CSIO), Chandigarh from 20th to 24th November, 2023.
- Attended One-Week Boot Camp Program on "Unmanned Aircraft Systems (UAS)/ Drone Technologies" at IIT Jammu, from 18th to 26th March 2023.
- Attended two-week industrial training at Webwheel Technologies (P) Ltd, New Delhi 08/11/2021 to 22/11/2021. I was exposed to the implementation of the production planning and control functions such as process planning, job scheduling maintenance management, inventory control, forecasting and quality systems.
- Attended One-Week Faculty Development Programme on "Emerging Challenges in Cyber Security," AICTE Training And Learning (ATAL) Academy, from 18/10/2021 to 22/10/2021 at Govind Ballabh Pant Engineering College.
- Attended One-Week Faculty Development Programme on "**Drug Engineering through Computer Aided Drug Design,**" AICTE Training And Learning (ATAL) Academy, from 13/09/2021 to 17/09/2021 at Dr. Harisingh Gour Central University Sagar M.P.
- Attended One-Week Faculty Development Programme on "Quality Assurance: The Gateway of Institutional Development" Organized by the Department of Applied Science, SAGE University, Indore, Supported by M. P. Council of Science and Technology Bhopal, from 09/08/2021 to 13/08/2021.

- Attended Faculty Development Programme on Computational Intelligence Systems and Security (CISS 2020) organized by School of Computer Science & Engineering, SMVDU held from 20/07/2020 to 24/07/2020.
- > Attended ATAL Academy online FDP on "Cyber Security" at JNU New Delhi from 26/05/2020 to 30/05/2020.
- Attended MHRD Sponsored TEQIP Assisted "Training on Future Skills Technology: Cyber Security" at Department of CSE, IIT Roorkee, from 24/02/2020 to 06/03/2020.
- Attended TEQIP-III Sponsored FDP on "Energy and Power Systems" organized by School of Energy Management, SMVDU, from 05/08/2019 to 09/08/2019.
- ➤ Attended AICTE Sponsored 7 Days Residential FDPs for **Student Induction Program**, organized by IIT Ropar, from 02/07/2019 to 08/07/2019.
- Attended TEQIP-III Sponsored Short-Term Course on "Scientific Computing with Python for Electrical Engineers" organized by IIT Bombay, from 11/02/2019 to 15/02/2019.
- Attended "One Month Residential Faculty Induction Program (FIP)", organized by Faculty Development Centre (FDC), Shri Mata Vaishno Devi University, KaKumaryal-182320, Katra, (Jammu & Kashmir), India, under Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT), 02/01/2019 to 01/02/2019.
- Attended TEQIP-III Sponsored Short-Term Course on "Modern Cryptography" organized by IIT Kharagpur, from 17/09/2018 to 21/09/2018.
- ➤ Attended TEQIP-III Summer Training Program on "Active Learning Workshop" conducted by IIT Bombay, from 11/06/2018 to 15/06/2018.
- Attended in AICTE recognized Short Term Course on "NS2/3 Simulator" at Computer Science Engineering Department, NITTTR Chandigarh, from 12/03/2018 to 16/03/2018.
- ➤ Attended "Training workshop for Faculty-Mentors on Induction Programme for New Students" conducted by **National Project Implementation Unit (NPIU), under MHRD**, New Delhi at PEC University of Technology, Sep. 22-24th, 2017.
- Attended "UGC-Sponsored 33rd Orientation Programme", at UGC-Human Resource Development Center, Punjabi University, Patiala, Punjab, India, 25th May-2017 to 21st June-2017.
- Attended QIP Short-Term Course on "Advanced Topics in Robust and Nonlinear Control (ATRNC)", Department of Electrical Engineering, Indian Institute of Technology (Banaras Hindu University) Varanasi from 14th to 20th February 2017.
- ➤ Attended two weeks ISTE STTP on CMOS, Mixed signal and Radio Frequency Design, conducted by **IIT Kharagpur**, Feb. 2017. (Online), 26/01/2017 to 04/02/2017.
- ➤ Participated in AICTE recognized Short Term Course on "Cloud Computing" through ICT, 5-9 Dec-2016, conducted by collaboration with NITTTR Chandigarh & DoCSE, SMVDU. (Online)
- ➤ Participated in AICTE recognized Short Term Course on "Optimization using MATLAB" through ICT, 24-28 October-2016, conducted by collaboration with NITTTR Chandigarh & DoME, SMVDU. (Online)
- ➤ Completed '14th Satellite & Internet Based Distance Learning Certificate Program' on "Applications of Remote Sensing & GIS for Natural Resources" from January 27th to March 27th, 2015 conducted by 'Indian Institute of Remote Sensing (IIRS) Dehradun, Indian Space Research Organization (ISRO)', Department of Space, Government of India.
- > Completed 'Thirteenth Satellite & Internet Based Distance Learning Certificate Program' on "Basics of Remote Sensing, Geographical Information System and Global Navigation Satellite System (RS, GIS & GNSS)" from August 4th November 14th, 2014 conducted by 'Indian Institute of Remote Sensing (IIRS) Dehradun, Indian Space Research Organization (ISRO)', Department of Space, Government of India.

***** Key Academic Projects:

VANET) Environments.

- Doctor of Philosophy (PhD) Internship: Under supervision of Dr. (Prof. /Chair), Kuochen Wang, National Chiao Tung University, Hsinchu, Taiwan (Republic of China).
 Area of Research: Offloading in Software Defined Networking (SDN) based Vehicular Ad-hoc Network (SD-
- **Doctor of Philosophy (PhD) Thesis:** Under supervision of Professor, Dr. R. K. Saket and guidance of Professor, Dr. S.C. Gupta, IIT (BHU), Varanasi.

Area of Research: Route Maintenance Parameters and Determining Factors of AODV Routing Stability in Ad-hoc Networks.

➤ M.Tech Dissertation: Under supervision of Associate Professor, Dr. R. K. Saket, IIT (BHU), Varanasi Title: Performance evaluation of DSDV and AODV routing protocols of Mobile Ad-hoc Networks (MANETs) using Network Simulator-2 (NS-2).

Descriptions: Comparative studies of the performance of AODV and DSDV routing protocol for different parameters under varying scenario. The simulation results were analysed by graphical manner and trace file based on QoS metrics such as throughput, drop, delay, jitter etc. The performance differentials have been analyzed based on network load, mobility and network size. The analysis of simulation result verifies the performance of DSDV and AODV routing protocol.

➤ **B. Tech Project:** Under supervision of Professor and Head of Department, Dr. Shirish Verma, NIT-Raipur. **Title**: Device Control through Telephony.

Descriptions: Appliances can be controlled remotely-from any part of the world through the mobile phone. For that 89C51 microcontroller is interfaced with mobile phone which will pick up calls through a relay and timer and will recognize the key pressed by the remote mobile phone to control the desired appliances/loads. Designed hardware contains DTMF Receiver, 555 Timer, Decoder, Inverter, D-flip flop, Relay etc. with this circuit.

Summer Internship/Vocational Training:

Summer Internships Program – 2013 at Indian Institute of Technology, (Banaras Hindu University), Varanasi Project Title: Design of Structured LAN and Wi-Fi Access Points for Banaras Hindu University (BHU).

Duration of Training: May, 2013

Descriptions: Design of Structured LAN for official buildings, hostels, and residential colonies of Banaras Hindu University and its simulation study on Graphical Network Simulator (GNS-III) / *Optimized Network Engineering Tools* (OPNET) for load balanced traffic flow on Wired and Wi-Fi Access Points.

Vocational Training at Manna Airport Raipur, Airport Authority of India (AAI).

Title: Remote control of CNS facilities and DVTR.

Duration of Training: May 21st, 2007 to May 25th, 2007.

Descriptions: Communication, navigation and surveillance (CNS) equipment and Air Traffic Service (ATS) operation procedure used for the air navigation and safe landing of aircraft under all weather conditions.

Summer Internship at **Bharat Sanchar Nigam Limited**, (A Government of India Enterprise), Office of the Telecom District Manager, Raipur.

Title: Controlling of OCB Switches, WLL, CDMA, and CAR-DECT

Duration of Training: June 26th, 2006 to July 08th, 2006.

Descriptions: The work involved studies on architecture, frequency concepts, modulation methods and its functionality of OCB Switches, WLL, CDMA and CAR-DECT etc.

***** Membership of Professional Bodies:

- ➤ The Institution of Electronics and Telecommunication Engineers, New Delhi. Life Membership: M-503310.
- Indian Society for Technical Education (ISTE), New Delhi. Life Membership: LM 135171.
- Computer Society of India (CSI), Life Member, ID: 1032220002.
- Internet Society (ISOC), USA. Registration Id 401779.
- ➤ International Association of Computer Science and Information Technology (IACSIT), Singapore. Membership Number: 80346227.
- ➤ Universal Association of Computer and Electronics Engineers (UACEE), United Kingdom. Associate Membership Number: AM1003244.

Editorial / Advisory & Scientific Board Member/ Reviewer:

- Associate Editor, Journal of Intelligent & Fuzzy Systems (JIFS), (SCIE, IF=2).
- Active reviewers of various Journals: IEEE, Elsevier, Springer, etc.
- ➤ IEEE BlackSeaCom 2019, Sochi, Russia
- > International Conference on Networks and Cryptology (NetCrypt), JNU, Delhi, India
- > IMPS-2019, IIIT Allahabad, India
- Wireless Personal Communications (WPC), Springer.

- > Simulation Modelling Practice and Theory, ScienceDirect, Elsevier.
- ➤ IEEE UPCON-2016 IIT (BHU).
- ➤ ICAESAM-2016 Kuala Lumpur.
- Advisory Board Member: IRSD-2016 NITTTR Chandigarh
- Editorial member: JOURNALS PUB.

***** Other Extension Tasks Undertaken:

- ➤ Central observer (G. D. Goenka Public School Jammu) of NEET-2018, conducted by the Central Board of Secondary Education on 6th May-2018.
- ➤ Central observer (Presentation Convent Sr. Sec. School Jammu) of NEET-2017, conducted by the Central Board of Secondary Education on 7th May-2017.
- Evaluated answer sheets of Jammu University 2015, 2016.
- Performed invigilation duty in SSRB exam, 2015
- Performed invigilation duty in Junior Assistant exam, 2015.
- Appointed as External Examiner for practical examination from May 27 to 29, 2015, JK Institute of Engineering, Bilaspur (C.G.).

❖ Involvement in Management & Institutional Development at University/ Department Level:

Session 2022-2023

- PhD Co-ordinator.
- ➤ Member of SRC of SoECE.
- ➤ Coordinator: Minor Project, Internship & MOOC Course.
- ➤ Lab in Charge IoT & 5G Lab
- Lab in Charge Communication Lab.

Session 2022-2023

- Member of SRC of SoECE.
- Communication Lab Incharge.
- Coordinator LMS Committee.
- ➤ Coordinator: Minor Project, Internship & MOOC Course.
- Perform Duty in Semester Registration for Academic Session 2021-2022.
- ➤ Member's AAC/BoS, SoECE.
- Anti-Raging Squad.
- Member of Committee for Stock Verification of Library Book of Central Library at SMVDU.
- Member of Office Equipment/Building/Furniture Upkeep/Lab/Maintenance Committee.

Session 2021-2022

- M. Tech ECE Coordinator.
- Member of SRC of SoECE.
- ➤ Perform Duty in Semester Registration for Academic Session 2021-2022.
- ➤ Member's AAC/BoS, SoECE.
- Minor Project, Internship, and MOOC Coordinator.
- Examination & Grievance Committee Member.
- Member of School Inspection Committee.
- Member of Office Equipment/Building/Furniture Upkeep/Lab/Maintenance Committee.
- Lab in Charge Communication Lab.
- Perform Invigilation Duties in Minor and Major Examinations.

- Member of an Internal Committee for Administrative & Academic Audit of the Schools & Sections of the University: Telecomm, Network Centre, Web Sections AVP Cell.
- Member of Committee for Stock Verification of Library Book of Central Library at SMVDU.
- Anti-Raging Squad.
- ➤ Member of School Research Committee from SoECE.

Session 2020-2021

- Coordinator for Communication Lab In-charge.
- ➤ Member's AAC/BoS, SoEE.
- Examination & Grievance Committee Member.
- ➤ Member of School Inspection Committee.
- Member of Anti-Raging Squad.
- Member of School Research Committee from SoECE.
- Central Coordinator for Spoken Tutorial Project, IIT Bombay (MHRD, GoI Funded).

Session 2019-2020

- ➤ Central Coordinator for Spoken Tutorial Project, IIT Bombay (MHRD, GoI Funded).
- Minor Project & MOOC Course Coordinator.
- Examination & Grievance Committee Member.
- Coordinator of School Inspection Committee.
- > Communication Lab Incharge.
- Office Equipment/Building/Furniture Upkeep/ Lab/Maintenance Committee Coordinator

Session 2018-2019

- Central Coordinator for Spoken Tutorial Project, IIT Bombay (MHRD, GoI Funded)
- Member for conduction of induction program for 1st year students.
- Member for document verification and registration for 1st year students.
- ➤ Coordinator for Departmental Purchase and Related Record Processing Committee.
- ➤ Coordinator for GATE-2019 (ECE) preparatory classes.
- Coordinated M.Tech Students for industrial visit to Semi-Conductor Laboratory (SCL), Chandigarh, Department of Space, Government of India.
- ➤ Member for Departmental Inspection Committee
- Performed duty in registration process for information of students ECE 4th semester (Dec-May 2019).
- Faculty mentors to students of DoECE for IIIrd Year students (Group D).

Session 2017-2018

- Coordinator for Departmental Purchase and Related Record Processing Committee.
- Coordinator for Departmental Inspection Committee.
- Escort ECE (M. Tech) -2016 Batch in 6th convocation of SMVDU
- Guided B.Tech & M.Tech Students for Industrial Visit to Air Force station Jammu.
- Central Coordinator for Spoken Tutorial Project, IIT Bombay (MHRD, GoI Funded).
- Member of Department / School Academic Calendar
- Faculty mentors to students of DoECE for IInd & IIIrd Year students (Group F & C).
- Performed duty in registration process for information of students (July-Dec-2017).
- ➤ Member Secretary & Member of classes committee for Department of Electronics communication & Engineering.
- Flying Squad Member for examination session Jan-May 2018.

Session 2016-2017

- Member of Selection Committee for filling various positions at SMVDU-TBIC.
- > Committee member to finalize the technical specifications for purchase of Public Address Lectern System at SMVDU.
- Central Coordinator for Spoken Tutorial Project IIT Bombay (MHRD, GoI Funded).
- ➤ Representative from DoECE for Alumni Affairs Committee.
- Faculty mentors to students of DoECE for IIIrd Year students (Group-A).
- Member of departmental purchase committee.
- Member of BoS of DoECE.
- Prepared question sets for the digital communication for the Non-GATE candidates applying for M.Tech. ECE 2017-19 Batch.

Session 2015-2016

- Library purchase committee member from school of ECE-2015.
- Member of Anti-Raging Squads (Group-D).
- Member of Team-B Committee: Created for data Compilation & Collection for NAAC.
- Escort ECE (B. Tech) -2015 Batch in 5th convocation of SMVDU.
- ➤ Performed duty in registration process for information of students (July-Dec-2015, Jan-June & July-Dec 2016).
- Prepared question set for digital communication & digital electronics for the Non-GATE candidates applying for M.Tech. ECE 2016-18 Batch.
- > Member of Departmental Purchase Committee.

***** Workshops/Tech-Fest/ Seminars:

- ➤ Participated in the '20th National Conference on Communications (NCC-2014)' during 28th February to 02nd March 2014, at IIT Kanpur, India
- Participated in author workshop on 'how to write scientific literature & improve quality of their manuscripts' held on February 10th, 2014, jointly organized by Springer and IIT (BHU).
- Participated in the Workshop on Image and Speech Processing (WISP-2013) held on 13th -14th December, 2013 at IIT Guwahati, India.
- ➤ Presented a paper on 'Swami Vivekananda's Conception of Education' in the National Seminar on 'Swami Vivekananda's Contribution to India' held from October 28th to 30th, 2013 at Ramakrishna Mission Home of Service, Varanasi.
- Attended the workshop on 'LABVIEW' held at Department of Electrical Engineering, IIT (BHU), Varanasi in collaboration with National Instruments on March 08th, 2013.
- ➤ Paper presented on 'MODEX (SIMULATION)' held the auspices of TECHNEX '11 at IIT (BHU), Varanasi during March 03th, 2011 to March 06th, 2011.
- ➤ Participated in Tech-fest 'Robot Making Competition' held in KSHITIJ '07 at IIT-KGP, Kharagpur during February 01st, 2007 to February 04th, 2007.

***** Extracurricular Activities:

- ➤ B+ national level certificate holder and course commander in 'National Adventure Exploration and Disaster Management Course' held in Pachmarhi, during May 28th, 2006 to June 06th, 2006.
- > Participated in 'National level Quiz Contest' held on March 16th, 2010 at IIT (BHU), Varanasi.
- Actively worked as a volunteer in '17th National Power Systems Conference (NPSC), held on December 12-14, 2012 at Department of Electrical Engineering, IIT (BHU), Varanasi.
- > Teaching Assistant: Held the position of teaching assistant under Prof. S. C. Gupta, IIT (BHU), Varanasi
- ➤ Invigilator: Worked as invigilator in various under graduate and post graduate examination under Dr. R. K. Saket, IIT (BHU), Varanasi.



(Associate Professor, DoECE (Under the mentorship of IIST-ISRO), Central University Jammu, Jammu)