

Profile Page



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Designation : Assistant Professor Grade-i

Department : Electronics and Comm. Engg.

Qualification : PhD Electronics and Communication (Motilal Nehru National Institute of Technology Allahabad)
M.Tech. VLSI Design (Centre For Development of Advanced Computing, Mohali)
B.E. Electronics and Communication (Institute of Engineering and Technology, Agra)

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Research Interests :

Machine-to-Machine Communications, Internet-of-Things, Ad-hoc networks, Medium access control protocols, Mobile Ad hoc Networks, Vehicular Ad hoc Networks.

Other Profile Links :

Google Scholar Link :

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Journal Publications :

Year	Journal	Publication
2024	International Journal of Cloud Computing, Inderscience Publications (Paper accepted)	Sachin Kumar, Pawan Kumar Verma, "A Comparative Study of Collision Avoidance Medium Access Control Protocols in Internet-of-Things,"
2023	Expert Systems with Applications, Elsevier Publications, Volume 216, April 2023	Nitin Kumar, Preeti Rani, Vinoda Kumar, Pawan Kumar Verma, and Deepika Koundal, "TEEECH: Three-Tier Extended Energy Efficient Clustering Hierarchy Protocol for Heterogeneous Wireless Sensor Networks,"
2022	Multimedia Tools and Applications, Springer Publications, Vol. 81, pp. 23355–23371, 2022	Shashwat Pathak, Rahul Raj, Kartik Singh, Pawan Kumar Verma, Basant Kumar, "Development of portable and robust cataract detection and grading system by analyzing multiple texture features for Tele-Ophthalmology,"

2022	IEIE Transactions on Smart Processing and Computing, Vol.11, no.1, pp. 49-56	Nitin Kumar, Vinoda Kumar, Pawan Kumar Verma, "ADV-LEACH2 Energy Efficient Clustering Protocols For Three-Tier Heterogeneous Wireless Sensor Networks,"
2019	Cluster Computing, Springer Publications	A Novel Energy Efficient and Scalable Hybrid-MAC Protocol for Massive M2M Networks
2019	Analog Integrated Circuits and Signal Processing, Springer Publications, 100, 79–91	Amit Kumar Pandey, Shipra Upadhyay, Tarun Gupta, and Pawan Kumar Verma, "Low Power, High Speed, and Noise Immune Wide-OR Footless Domino Circuits using Keeper Controlled Method",
2018	Circuits Systems and Signal Processing, Springer Publications	Analysis of Noise Immunity for Wide OR Footless Domino Circuit Using Keeper Controlling Network
2018	Circuit World, Emerald Publications	Sleep signal controlled footless domino circuit for low leakage current
2017	International Journal of Big Data Intelligence, Inderscience Publications, vol. 4, no. 3, pp. 149-160, July, 2017	Throughput-Enhancement of a Novel Hybrid-MAC Protocol for M2M Networks
2016	Journal of Network and Computer Applications, Elsevier Publications, vol. 66, Pages 83–105	Machine-to-Machine (M2M) Communications: A Survey
2016	Journal of Network and Computer Applications, Elsevier Publications, vol. 75 (c), pp. 77--88	A Novel Hybrid Medium Access Control Protocol for Inter-M2M Communications
2016	International Journal of Mobile Computing & Multimedia Communications, IGI Global Publishers, vol. 7, No. 1, pp. 41—60, March, 2016	Throughput- Delay Evaluation of a Hybrid-MAC Protocol for M2M Communications

Conference Publications :

Year	Conference	Publication
2022	Intelligent Computing Techniques for Smart Energy Systems. Lecture Notes in Electrical Engineering, vol 862. Springer, Singapore, 2022	Chakraborty A., Verma A., Verma P.K., Verma R., "Performance Evaluation of a Hybrid-MAC Protocol for Small Sensor M2M Devices,"
2022	IEEE Conference on Information and Communication Technology, 2022	Sachin Kumar, Ansh Verma, Pawan Kumar Verma and Rajesh Verma, "A Comparative Study of Energy Efficient Collision Avoidance Protocols for WBAN,"
2022	IEEE Conference on Information and Communication Technology, 2022	Tania Singh, Ansh Verma, Pawan Kumar Verma and Rajesh Verma, "A Proposition to Effective Execution of Power-On Test Case Script over SoC under Post-Silicon-Validation,"
2022	1st International Conference on Progressive Research in Data Engineering. (Paper accepted)	Indu Bala and Pawan Kumar Verma, "Comparative analysis of NavIC and GPS,"
2022	7th World Engineering Conference on Contemporary Technologies (WECON-2022). (Paper accepted)	Yash Walia and Pawan Kumar Verma, "Demonstration of Normally-OFF Recessed MIS-Gate Technique on AlGaIn/GaN HEMT for Improved Power Dissipation,"
2021	Recent Trends in Electronics and Communication. Lecture Notes in Electrical Engineering, vol 777. Springer, Singapore	A Novel High-Throughput Medium Access Control Protocol for Concurrent Transmissions in Internet of Things

2021	5th International Conference on Information Systems and Computer Networks (ISCON), 2021	An Energy-Efficient Wireless Sensor Networks Approach based on ADV-LEACH2 Clustering Protocols for Heterogeneous and Homogeneous Networks
2021	Cyber Security and Digital Forensics . Lecture Notes on Data Engineering and Communications Technologies, vol 73. Springer, Singapore, 2021	Kumar, N., Kumar, V., Verma, P.K., “A Comparative Study of the Energy-Efficient Advanced LEACH (ADV-LEACH1) Clustering Protocols in Heterogeneous and Homogeneous Wireless Sensor Networks,”
2021	2021 First International Conference on Advances in Computing and Future Communication Technologies (ICACFCT), pp. 1-6, 2021	R. Khatri, A. Verma, P. K. Verma and R. Verma, "Performance Evaluation of a Hybrid Medium Access Control Protocol for Machine-to-Machine Networks,"
2020	4th International Conference on Electronics, Communication and Aerospace Technology (ICECA), 2020	A Comparative Investigation of Blood Vessels in Retinal Images
2015	7th IEEE International Conference on Computational Intelligence and Communication Networks (CICN-2015).	Pawan Kumar Verma, Rajesh Verma, Arun Prakash, Rajeev Tripathi, and Kshirasagar Naik, “A Novel Scalable Hybrid-MAC Protocol for Densely Deployed M2M Networks,”
2014	5th International Conference on Computer and Communication Technology (ICCCT-2014)	A Robust Hybrid-MAC Protocol for M2M Communications
2010	IEEE International Conference on Power, Control and Embedded Systems (ICPCES), 2010, pp. 1 – 6.	R. Verma, A. Prakash, P.K. Verma, N. Tyagi, and R. Tripathi, “A novel MAC protocol for MANETs using smart antenna system,”
2009	International Conference on Advances in Recent Technologies in Communication and Computing, 2009 (ARTCom '09), pp. 186 – 188	Pawan Verma, Harpreet Kaur, Mandeep Singh, and Balwinder Singh, “VHDL Implementation of FFT/IFFT Blocks for OFDM,”
2009	International Conference on computational intelligence research and applications, 2009, pp.55- 58	H. Kaur, B. Singh, and P. Verma, “Low power testing technique using LFSR Transition,”

Book/Chapter Publications :

Type	Title	Publisher	Authors	ISBN/ISSN No.	Year
Book Citation Indexed	Massive Access Control in Machine-to-Machine Communications	IGI Global	Pawan Kumar Verma, Rajesh Verma, Arun Prakash, Rajeev Tripathi	9781522588368	2019

Research Projects :

Role	Project Type	Title	Funding Agency	From	To	Amount	Status	Co-Investigator
Co-PI	Research	NavIC Based Asset Tracking System	ISRO	27-02-20	31-03-23	21 Lacs	Ongoing	Dr. Sateesh Kumar Awasthi

Co-PI	Research	MANAGEMENT OF COMPLEX ATMOSPHERIC CONSTITUENTS AND INTERFERENCE PROBLEM IN 5G NETWORKS	King Khalid University, Kingdom of Saudi Arabia	17-05-22	16-05-23	30 Lacs	Ongoing	Dr. Rajesh Verma
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Professional Affiliations :

Designation	Organization
Member	IEEE

PhD Supervised :

Scholar Name	Research Topic	Status	Year	Co-Supervisor
Nitin Kumar	A NOVEL OPTIMIZED ENERGY-EFFICIENT CLUSTERING APPROACH FOR PROLONGING THE NETWORK LIFETIME IN HETEROGENEOUS WIRELESS SENSOR NETWORK	Completed	2022	Dr. Vinod Chaudhary