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Rajiv Misra

**Rajiv Misra**

Professor and Head



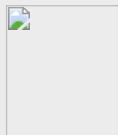
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Research Areas

Distributed Systems, Cloud Computing, Big Data Computing, Consensus, Blockchain, Cloud IoT Edge Computing, Adhoc Networks and Sensor Networks

Students

Sr. No.	Photo	Area of Research	Deg
1	 Anurag Choubey	Blockchain-enabled Electric Vehicle Charging Network, NS3, Deep Learning	
2	 Rohit Kumar Gupta	SDN-NFV, 5G & Beyond, 6G Networks, Network Slicing, UAV Communications, Multi-access Edge Computing (MEC), AI, Machine Learning, Deep Learning, Reinforcement Learning, Deep-Q Networks (DQN).	
3	 Amit Ranjan	Deep Learning, Machine Learning	

4	 Shivendu Mishra	IoT, smart city	Part-time
5	 Manoj Kumar Balwant	Machine Learning For big data	Part-time
6	 Nelson Sharma	Deep Learning, Edge and Fog Computing	
7	 Aswini Ghosh	5G Network	Part-time
8	 Praveen Kumar	AI -based 6G network slicing	
9	 Sudhir Kumar	AI -based 6G network slicing	On-going
10	 Vaneet Kour	Cloud Computing, deep learning, VM consolidation	
11	 Shivani Tripathi		part-time
12	 Priyadarshni		part-time
13	 Anil Verma		

	14	 Rupesh Kumar Sah		
Former Students	Sr. No.	Photo	Area of Reasearch	Current Position
	1	 Rohit Kumar Gupta		
	2	 Amit Ranjan		
	3	 Abhijit Kumar		
	4	 Sourajit Behera		
	5	 Debasis Das	Assistant Professor, IIT Jodhpur, Rajasthan, India	
	6	 Shailendra Shukla	Assistant Professor, MNIT, Allahabad, India	
	7	 Ram Narayan Yadav	Institute of Infrastructure Technology Research and Management (IITRAM) Ahmedabad, India	
	8	 Ajay Pratap	Assistant Professor, Dept. of CSE, IIT (BHU) Varanasi, India	
	9	 Yashwant Singh Patel	Assistant Professor, CSED, Thapar Institute of Engineering and Technology, India	

Current Sponsored Projects	Sr. No.	Title	Principal Investigator	Co-Principal Investigator	Duration	Sponsoring Agency	Cost	Status
	1	Creating Augmented Reality for Restoration/ Reconstruction of Cultural Heritage Site- Nalanda for immersive experience	Prof. Rajiv Misra					
	2	AI based 6G Network Slicing for multi-UAV prototype	Dr Rajiv Misra					
	3	Microsoft AI for Health COVID-19 Grant	Dr. Rajiv Misra					
	4	Low-cost Energy Efficient Cloud for Cyber-Physical Disaster Management Systems	Dr. Rajiv Misra					
	5	Vehicular Sensor and Mesh Networks based Future ITS	Dr. Rajiv Misra					
	6	Distributed EV charge scheduling and consensus based control for EV charging network	Indian PI: Dr. Rajiv Misra, IIT Patna German PI: Prof. Dr.-Ing. Axel Sikora, Offenburg University, Germany					
Member of Professional bodies	IEEE Senior							
Books	<ul style="list-style-type: none"> Efficient and Effective Algorithm for Wireless Networks D Das, M Rajiv Journal of Data communication, networks, 1-92 2014. Cellular Automata Based on Block Cipher and Road Traffic Model D Das, M Rajiv Cellular Automata Based on Block Cipher and Road Traffic Model 2013. 							
Publications / Journals	Journal Publications: <ul style="list-style-type: none"> Shivendu Mishra, Anurag Chaubey, Sri Vaibhav Devarasetty, Nelson Sharma, Rajiv Misra. "An Innovative Multi-Head Attention Model with BiMGRU for Real-Time Electric Vehicle Charging Management through Deep Reinforcement Learning" Cluster Computing, Springer, Accepted SCIE- Impact factor: 4.4 Choubey, A., Sikarwar, A., Asoba, S., & Misra, R. (2024). Towards an IPFS-based highly scalable blockchain for PEV charging and achieve near super-stability in a V2V environment. Cluster Computing, 1-42. Choubey, A., Mishra, S., Behera, S., Misra, R., Pandey, A. K., & Pandey, D. (2024). Smart Homes, Smart Choices: Using Big Data to Boost Energy Efficiency and Environmental Sustainability. Electric Power Components and Systems, 1-19. Kumar, A., Misra, R., Singh, T. N., & Dhiman, G. (2023). APO-AN feature selection based Glorot Init Optimal TransCNN landslide detection from multi source satellite imagery. Multimedia Tools and Applications, 1-38. 							

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- Nelson Sharma, Aswini Ghosh, **Rajiv Misra**, Supratik Mukhopadhyay, Gokarna Sharma, "Collisionless Pattern Discovery in Robot Swarms Using Deep Reinforcement Learning." *CoRR abs/2209.09865* (2022)
- Debasis Das, **Rajiv Misra**, EASBVN: efficient approximation scheme for broadcasting in vehicular networks. *Wireless Networks* 27(1), 339-349, 2021 (Springer)
- Ajay Pratap, **Rajiv Misra**, Sajal K. Das, Graph-based Resource Allocation Algorithms for Heterogeneous 5G Networks, *IEEE Transactions on Mobile Computing*, 20(2): 603-619 (2021)
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- YS Patel, A Baheti, **R Misra**, Interval graph multi-coloring-based resource reservation for energy-efficient containerized cloud data centers, *The Journal of Supercomputing*, 1-49, (2020) Springer
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Distributed Randomized k-Clustering Based PCID Assignment for Ultra-Dense Femtocellular Networks. *IEEE Trans. Parallel Distrib. Syst.* 29(6): 1247-1260 (2018)
- **Ajay Pratap, Rajiv Misra:**
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- QoS based opportunistic channel scheduling in cognitive radio networks U Gupta, RN Yadav, **R Misra** IEEE Region 10 Conference TENCON 2014.
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- Lightweight Software Model for Target Localization in Wireless Sensor Networks. **R Misra**, S Shukla, V Chandel DCOSS, 301-303 2013.
- Vehicular communication via compass labeling **R Misra**, S Shukla, BM Baveja Consumer Communications and Networking Conference (CCNC), 2011 IEEE, 472-476, 2011.
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