

**Name** : Rajib Kumar Das  
**Designation** : Associate Professor  
**Specialization** : Parallel and distributed computing, sensor network, cloud computing, sensor cloud, NLP  
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### Educational qualifications

College/University where the degree was obtained	Degree
Jadavpur University	B.E (Electronics & Telecommunications)
IIT Madras	M.Tech (Computer Science)
ISI, Kolkata	Ph.D

### Research guidance:

Number of researchers awarded M.Phil/ Ph.D degrees : 1

Number of researchers thesis submitted : 1

Number of researchers pursuing M.Phil/ Ph.D : 3

### List of Publications (Journal)

1. R. K. Das, K. Mukhopadhyaya and B. P. Sinha, "A new family of bridged and twisted hypercubes," IEEE Transactions on Computers, vol 43, no. 10, pp 1240-1247, Oct. 1994.
2. R. K. Das and B. P. Sinha, "Optimal communication algorithms in distributed loop networks," Journal of Parallel and Distributed Computing, vol. 30, no.1, pp. 85-90, Oct. 1995.
3. R. K. Das and B. P. Sinha, "A new topology with odd degree for multiprocessor systems," Journal of Parallel and Distributed Computing, vol. 39, pp. 87-94, 1996.
4. S. Sen Gupta, R. K. Das, K. Mukhopadhyaya and B. P. Sinha, "A family of network topologies with multiple loops and logarithmic diameter," Parallel Computing, vol. 22, pp. 2047-2064, 1997.
5. Biplab K Sen, Anupam Sarkar, Sunimal Khatua, Rajib K Das, " Cost-effective Routing as a Service (RaaS) in Sensor-Cloud" International Journal of Sensor Network (inderscience), 2019.
6. R. K. Das and N. Das, "GSE: A full-access multistage interconnection network of arbitrary size," International Journal of System Science, 1997.
7. Utpal Sarma, Jugal Kalita, Rajib K Das, Acquisition of morphology of an Indic Language from Text Corpus, ACM Transac. Asian Lang. Inform. Process. 7(3), 2008.
8. Sunirmal Khatua; Preetam Sur; Rajib K Das; Nandini Mukherjee, Heuristic-based Resource Reservation Strategies for Public Cloud, IEEE Transactions on Cloud Computing.
9. Ritamshirsa Choudhur, Rajib K Das, "Coverage of Targets in Mobile Sensor Networks with Restricted Mobility", February 2018, IEEE Access
10. Ritamshirsa Choudhur, Rajib K Das Efficient Area Coverage in Wireless Sensor Networks Using Optimal Scheduling April 2019 Wireless Personal Communications 107(1) DOI: 10.1007/s11277-019-06331-z

### List of Publications Conference proceedings

1. R. K. Das, K. Mukhopadhyaya and B. P. Sinha, "Bridged and twisted hyper- cubes with reduced diameters," in Proc. International Conference on Parallel Processing, pp. I-72 – I-75, Aug 17-21, 1992.
2. R. K. Das and B. P. Sinha, "A new family of odd degree graphs," in Proc. Fourth National Seminar on Theoretical Computer Science, pp. 91 – 102, June 16 – 18, 1993.
3. S. Sen Gupta, R. K. Das, K. Mukhopadhyaya and B. P. Sinha, "A new family of low-diameter network topologies with multiple loops," in Proc. First Inter-national Workshop on Parallel Processing, pp. 41-46, December 26-31, 1994, Bangalore.
4. R. K. Das and N. Das, "A generalized full-access Multistage Interconnection Network with minimum cost," Proc. High Performance Computing, 1996.
5. D. K. Bhattacharyya, R. K. Das and S. Nandi, "An FFT-based enciphering scheme," Proc. of International Conference on Information Technology, pp. 250-254, Bhubaneswar, December 20-22, 1999.
6. D. K. Bhattacharyya, R. K. Das and S. Nandi "An efficient image clustering technique," Proc. of International Conference on Information Technology, pp. 244-249, Bhubaneswar, December 20-22, 1999.
7. R. K. Das and D. K. Bhattacharyya, "A new scheme for SEC-DED codes," Proc. of International Forum cum Conference on Information Technology and Communication at the dawn of the new millennium. pp. 81-88, August 1-4, 2000, Bangkok, Thailand.
8. R. K. Das, "A Parallel k-medoids Clustering Algorithm," Proc. of 8th Inter- national Conference on Advanced Computing and Communications (ADCOM 2000), pp. 328-331, Cochin, India, December 14-16, 2000.
9. R. K. Das, "A Scalable Parallel Algorithm for k-means Clustering," Proc. of 8th International Conference on Advanced Computing and Communications (ADCOM 2000) pp. 250-253, Cochin, India, December 14-16, 2000.
10. R. K. Das, A. Das, D. K. Bhattacharyya, "A distributed K-medoids algorithm for large data sets," Proc. WDC 2000, Jadavpur, 2000.
11. Rajib K Das and Dhruba K Bhattacharyya, Parallel Algorithm for Clustering in Large Spatial Database, Proceedings of CIT 2003, Bhubaneswar, December 21-25, 2003.
12. Bhogeswar Bora, Dhruba K Bhattacharyya, and Rajib K Das, A Parallel Density-Based Data Clustering Technique on Distributed Memory Multicomputers, in Proceedings of ADCOM 2004, Ahmedabad, Dec. 2004.
13. Utpal Sharma, Jugal Kalita, and Rajib K Das, "Classification of words based on affix evidence" International Conference on Natural Language Processing, ICON-2002, Mumbai, December 18-21, 2002, pp 31-39.

14. Utpal Sharma, Jugal K Kalita, and Rajib K. Das, "Root Word Stemming by Multiple Evidence from Corpus 6th International Conference on Computational Intelligence and Natural Computing (CINC-2003), North Carolina, September 26-30, 2003.
15. J. Kalita, U. Sharma, R. K. Das, "Unsupervised Learning of Morphology for Building Lexicon for a Highly Inflectional Language", Morphological and Phonological Learning: Proceedings of the 6th Workshop of the ACL Special Interest Group in Computational Phonology (SIGPHON), July 2002, Philadelphia, pp 1-10.
16. Rajib K Das, "Adaptive fault-tolerant routing in star-graphs", Lecture Notes in Computer Science, Springer Verlag Heidelberg, ISSN:0302- 9743, Vol. 3326/2004, Proceedings of IWDC 2004, pp. 385-390, Kolkata, 2004.
17. Rajib K Das, "Routing and topological properties of enhanced OTIS-cube", in Proceedings of ADCOM 2005, Coimbatore, 2005.
18. Rajib K Das, "Fault tolerant routing in folded hypercubes using extended safety vector", Proceedings of ADCOM 2005, Coimbatore, 2005.
19. Rajib K Das, "Fault tolerant routing in star graphs using fault vector", Lecture Notes in Computer Science, Springer Verlag GmbH, ISSN:0302-9743, Vol. 3741/2005, Proceedings of IWDC 2005, pp. 475-486, Kharagpur, 2005.
20. Rajib K Das, "Enhanced OTIS k-ary n-cube networks—", ICDCIT 2006, Lecture Notes in Computer Science, Springer Verlag, pp. 200-211, Dec. 2006.
21. P. S. Reddy, N Sarma, Rajib K Das, "Enhancing Fault-Tolerance in a Distributed Mutual Exclusion Algorithm", Proceedings of the 9th International Conference on Information Technology. pp. 56-59, ICIT December 2006. IEEE Comp. Society 2006. ISBN 0-7695-2635-7
22. Rajib K Das, "Diameter and Routing in Enhanced OTIS-cube", in Proc. International Conference on Computing, Theory and applications: ICCTA 2007, pp. 188-192. Indian Statistical Institute, Kolkata, March 2007.
23. Rajib K Das, Fault Tolerant Routing Using Improved Safety Vector, IEEE PGDC 2010, Proceedings of Parallel Distributed and Grid Computing, 2010
24. A Dutta, K Thakkar, S Khatua, Rajib K Das, "Power Efficient Data Gathering for Sensor Network", Distributed Computing and Internet Technology (ICDCIT 2013:Springer), pp. 232-243
25. S Baksi, A Sinha, S Khatua, Rajib K Das, "Finding the maximum lifetime data-gathering tree in sensor networks", IEEE Intelligent Sensors, Sensor Networks and Information Processing (ISSNIP 2014)
26. A Bhattacharya, S Ghatak, S Ghosh, Rajib K Das, "Simulated Annealing Approach onto VLSI Circuit Partitioning", Mathematical Journal Of Interdisciplinary Science, 2014
27. Biplab K Sen, S Khatua, Rajib K Das, "Target coverage using a collaborative platform for sensor-cloud", 2015 IEEE International Conference on Advanced Networks and Telecommunication Systems (ANTS 2015)

28. Ritamshirsa Choudhuri, Rajib K Das, "Maximum lifetime scheduling for area coverage in wireless sensor networks", 2015 IEEE International Conference on Advanced Networks and Telecommunication Systems (ANTS 2015)
29. S Ghosh, B Sen, R K Das, "Bijective mapping of arbitrary finite state machine", International Conference on High Performance Computing and Applications (ICHPCA, 2014)
30. Sharmistha Mandal, Sunirmal Khatua, Rajib K Das, "Bid Selection for Deadline Constrained Jobs over Spot VMs in Computational Cloud" January 2017 Conference: International Conference on Distributed Computing and Internet Technology (ICDCIT 2017, Springer)
31. Ritamshirsa Choudhur, Rajib K Das, "Efficient relocation of mobile sensors for target coverage", September 2017 DOI: 10.1109/ICACCI.2017.8125978 Conference: 2017 International Conference on Advances in Computing, Communications and Informatics (IEEE ICACCI)
32. Kamallesh Karmakar, Sunirmal Khatua, Rajib K Das, "Efficient virtual machine placement in cloud environment September 2017 DOI: 10.1109/ICACCI.2017.8125973 Conference: 2017 International Conference on Advances in Computing, Communications and Informatics (IEEE ICACCI)
33. Biplab Kanti Sen, Sunirmal Khatua, Rajib K Das, "Optimal Mapping of Applications on Data Centers in Sensor-Cloud Environment, In proceedings: Advanced Computing and Systems for Security (ACSS 2018)
34. Sanjoy Mondal, Saurav Ghosh, Sunirmal Khatua, Rajib K Das, Utpal Biswas, "Cost Effective Algorithms for Participant Selection Problem in Mobile Crowd Sensing Environment" Conference: 2018 Fifth International Conference on Parallel, Distributed and Grid Computing (PDGC)
35. Anurina Tarafdar, Sunirmal Khatua, Rajib K Das, "QoS Aware Energy Efficient VM Consolidation Techniques for a Virtualized Data Center", Conference: 2018 IEEE/ACM 11th International Conference on Utility and Cloud Computing (UCC)

Membership of Learned Societies: IEEE member

Awards: Best Paper award for publication number 27.

Other notable activities: PC member :ACSS, IEEE ANTS, Reviewer : JPDC, IEEE Access