

Dr. Rakhi Garg

Associate Professor,

Computer Science, Mahila MahavIdyalaya, Banaras Hindu University, Varanasi

Education

- Qualified UGC-NET for eligibility for lectureship in Computer Science & Applications in Universities/Institutions throughout the country.
- PhD in Computer Science
 Done PhD in Association Rule Mining Algorithms at Department of Computer Science, Institute of Science,
 Banaras Hindu University, Varanasi (INDIA).
- Master in Computer Science from Banaras Hindu University, Varanasi, INDIA, 1995-1997 with 1st Division
- Bachelors in Computer Science from Banaras Hindu University, Varanasi, INDIA, 1992-1995 with 1st Division
- Intermediate with 1st Division (73.6%) in 1991 from C.B.S.E. Board
- High School with 1st Division (82%) in 1989 from C.B.S.E. Board

Membership of Professional Bodies

- Life member of International Association of Engineers (IAENG)
- Life member of International Association of Computer Science and Information Technology (IACSIT)

PhD Guidance

S. No.	Name of Candidate	Title of Thesis	Status
1.	Sudhakar Singh	Performance Analysis of MapReduce Based Apriori Algorithms on Hadoop Cluster	Awarded
2.	Pankaj Singh	Data Mining Algorithms	In Progress
3.	Atul Kumar Srivastava	Acceleration of Page rank Computation Using Extrapolation Techniques	Submitted
4.	Mitali Srivastava	Performance Analysis of Data Preprocessing Algorithms in Web Usage Mining using MapReduce Framework	Submitted
5.	Dipika Singh	Social Media Mining	In Progress

Scopus Author ID: 26649910800

Publications in International Journals

- Atul Srivastava, Rakhi Garg, P. K. Mishra, "Discussion on Damping Factor Value in PageRank Computation, International Journal of Intelligent Systems and Applications, Vol. 9, Issue 9, ISSN 2074-904X. (2017) (SCOPUS Indexed)
- 2. Atul Srivastava, Rakhi Garg, P. K. Mishra, "Analysis of Iterative Methods in PageRank Computation", Journal of Information and Optimization Sciences, Taylor & Francis, Vol. 39, Issue 1, ISSN 0252-2667(2017) (Web of Science (ESCI))
- Mitali Srivastava, Rakhi Garg, P. K. Mishra, "A MapReduce-based User Identification Algorithm in Web Usage Mining", International Journal of Information Technology and Web Engineering, IGI Global, Vol. 13, Issue 2, ISSN 1554-1045. (2018) (SCOPUS Indexed, Web of Science (ESCI)).
- Mitali Srivastava, Rakhi Garg, and P. K. Mishra, "A MapReduce-based Parallel Data Cleaning Algorithm in Web Usage Mining", International Journal of Computer Science and Applications, Vol. 14, Issue 2, ISSN 0972-9038 (2017) (SCOPUS Indexed)
- Sudhakar Singh, Pankaj Singh, Rakhi Garg, P. K. Mishra, "Mining Association rules in various computing environments: A Survey", International Journal of Applied Engineering Research, Vol. 11, Issue 8, ISSN 09734562.(2016) (SCOPUS Indexed)
- 6. Sudhakar Singh, Rakhi Garg, P. K. Mishra, "Performance optimization of MapReduce-based Apriori algorithm on Hadoop cluster", Computers and Electrical Engineering, ISSN-00457906, (2017) (ELSEVIER Indexed, Online)
- Mitali Srivastava, Atul Srivastava, Rakhi Garg, P. K. Mishra, "Experimental Study of Time Oriented and Referrer oriented Session Identification Methods in Web Usage Mining", Vol. 9, No. 1, International Journal of Electronics Engineering, ISSN 0973-7383. (2017) (ICI Indexed)

- 8. Rakhi Garg, P. K. Mishra, "Exploiting Parallelism in Association Rule Mining Algorithms", published in an International Journal of Advancements in Technologies, Vol.2, ISSN 0976-4860.
- Rakhi Garg, P. K. Mishra, "Data decomposition technique proposed for candidate itemset generation of association rule mining algorithm on heterogeneous clusters", International Journal of Innovative Technology and Exploring Engineering, Vol. 2., ISSN 2278-3075.
- Sudhakar Singh, Rakhi Garg, P. K. Mishra, "A Comparative Study of Association Rule Mining Algorithm on Grid and Cloud Computing", International Journal of Emerging Technologies in Computational & Applied Sciences, Issue of IASIR, Vol. 2,ISSN 2279-0047 (2014)
- Atul Srivastava, Mitali Srivastava, Rakhi Garg, P. K. Mishra, "Comparative Study of Web Page Ranking Algorithms", International Journal of Emerging Technologies in Computational & Applied Sciences, Issue of IASIR, Vol. 1, ISSN 2279-0047 (2014)
- 12. Mitali Srivastava, Rakhi Garg, P. K. Mishra, "Preprocessing Techniques in Web Usage Mining: A Survey", International Journal of Computer Applications, Vol. 97, ISSN 00975-8887 (2014)
- 13. Atul Srivastava, Rakhi Garg, P. K. Mishra, "Issues in Sequential Web Page Ranking Algorithms", International Journal of Advanced Research in Computer Science and Software Engineering, Volume 5, ISSN: 2277-128X(2015)
- **14.** Sudhakar Singh, Rakhi Garg, P. K. Mishra, "Big Data: Technologies, Trends and Applications", International Journal of Computer Science and Information Technologies, Vol. 6, Issue 5, ISSN 0975-9646.
- **15.** Sudhakar Singh, Rakhi Garg, P. K. Mishra, "Performance Analysis of Apriori Algorithm with Different Data Structures on Hadoop Cluster, International Journal of Computer Applications, Vol. 128, Issue 9,ISSN 0975-8887.
- **16.** Sudhakar Singh, Rakhi Garg, P. K. Mishra, "Some observations of Improved Apriori Algorithms", International Journal of Emerging Trends in Electrical and Electronics, Vol. 11, Issuse 5,ISSN 2320-9569.
- Pankaj Singh, Sudhakar Singh, Rakhi Garg, P. K. Mishra, "Comparative study of Data Mining Algorithms through Weka", International Journal of Emerging Research in Management & Technology, Vol. 4, Issuse 9, ISSN 2278-9359.(2015)
- **18.** Atul Srivastava, Rakhi Garg, P. K. Mishra, "Comparative analysis of Power method and Guass Seidel method in PageRank computation, International Journal of Computer Engineering and Applications, Vol. IX, Issue VIII, ISSN 2321-3469.(2015)
- 19. Atul Srivastava, Rakhi Garg, P. K. Mishra, "Analysis of Successive over Relaxation method in PageRank computation, International Journal of IT & Knowledge Management, Vol. 9, No. 1, ISSN 0973-4414.(2015)
- Mitali Srivastava, Rakhi Garg, P. K. Mishra, "Comparative analysis of Robot Detection Techniques on Web Server log", International Journal of Advanced Research in Computer and Communication Engineering, Vol. 4, Issuse 9, ISSN 2319-5940.(2015)
- **21.** Mitali Srivastava, Rakhi Garg, P. K. Mishra, "Analysis of user identification methods in web usage mining", International Journal of Computer Engineering and Applications, Vol. IX, Issue VIII, ISSN 2321-3469.(2015)
- 22. Mitali Srivastava, Atul Srivastava, Rakhi Garg, P. K. Mishra, "Analysis of Robot detection approaches for Ethical and Unethical Robots on Web Server Log", Volume 8, No. 5, ISSN 0976-5697, (2017).
- 23. Atul Srivastava, Mitali Srivastava, Rakhi Garg, P. K. Mishra, "Parallel PageRank Algorithms: A survey", Vol. 5, Issue 5, International Journal on Recent and Innovation Trends in Computing and Communication, ISSN 2321-8169.(2017)
- 24. Dipika singh, Rakhi Garg, "Some observations on Community Detection Algorithms in Social Networks", Vol. 6, Issue 12, International Journal of Engineering Science Invention, ISSN 2319-6734 (2018).

Publications in the proceedings of IEEE/ Elsevier Conference (International Conference)

- 1. Rakhi Garg, P. K. Mishra, "Issues and Challenges in Data Mining Algorithms", paper published in the proceeding of 2009 IEEE International Advance Computing Conference, organized by Thapar University, Patiala, IEEE Delhi section and IEEE Computer Society Chapter Delhi Section.
- Rakhi Garg, P. K. Mishra, "Some observations on Sequential, Parallel and Distributed Association Rule Mining Algorithms", paper published in the proceedings of International Conference on Computer and Automation Engineering, published by IEEE Computer Society, Bangkok, IEEE explore. (SCOPUS Indexed)
- Pankaj Singh, Rakhi Garg, P. K. Mishra, "Diversified Courseware Technology: A New Hope to Enhance the Educational Achievement of Students with and without Special Needs in the Inclusive Classroom", paper published in the Proceedings of the 2013 IEEE International Conference in MOOC, Innovation and Technology in Education (MITE), IEEE Catalog Number: CFP1374W-CDR, ISBN: 978-1-4799-1625-2 (SCOPUS Indexed)
- Sudhakar Singh, Rakhi Garg, P. K. Mishra, "Review of Apriori Based Algorithms on MapReduce Framework", Proc. International Conference on Communication and Computing (ICC - 2014), ISBN (Print): 978-93-5107-244-7, pp. 593-604, Elsevier, June 12th-14th, 2014, Bangalore, India.
- Mitali Srivastava, Rakhi Garg, P. K. Mishra, "Analysis of Data Extraction and Data Cleaning in Web Usage Mining", in the proceedings of the 2015 International Conference on Advanced Research in Computer Science Engineering & Technology (ICARCSET 2015), Article No. 13, ACM New York, NY, USA @2015, ISBN 978-1-4503-3441-9, pp. 63-68, March 06-07,2015. (SCOPUS Indexed)
- Sudhakar Singh, Rakhi Garg, P K Mishra, "Observations on factors affecting performance of MapReduce based Apriori on Hadoop Cluster", IEEE International Conference on Computing, ICCCA2016 ((SCOPUS Indexed))

Book Chapter

- Rakhi Garg, Chapter 2, Information Systems and Concepts in Study Material of Paper-6 of Information Systems Control
 and Audit at Final level of Chartered Accountancy Courses, 2013, ISBN 978-81-8441-077-8
- Rakhi Garg, Mitali Srivastava, Atul Srivastava, Barriers and inventiveness for women in Science & Technology, Parivartan Ek Paridrishya, Kala Prakashan, 2016, ISBN 978-93-85309-85-4
- Rakhi Garg, P K Mishra, Application of Data Mining in NREGA, Role of ICT in MGNREGA, Computer Society of India, ISBN 978-81-921475-0-5

Conference/Workshop Organised

- National Conference & Workshop on High Performance Computing & Applications and Research promotion workshop on IGAA-2012, Nov. 5-10, 2012, Dept. of Computer Science, Banaras Hindu University.
- National Workshop on QGIS, August 19-25, 2018, Mahila Mahavidyalaya, Banaras Hindu University.

Administrative Responsibilities

- Incharge Computer Science, MMV, Banaras Hindu University, Varanasi since 2009.
- Chairman of Badminton (W) for the session 2008-2009, 2009-2010, 2010-2011, 2011-2012, and 2013-2014 of Banaras Hindu University, Varanasi.
- Nodal person of MMV, Banaras Hindu University, Varanasi.
- Warden of JK Hostel, MMV, Banaras Hindu University, Varanasi from July 1, 2012- July 2015.
- Member of Training & Placement committee, MMV, Banaras Hindu University, Varanasi.
- Worked as a member of Cyber Hut Committee, MMV, Banaras Hindu University, Varanasi
- Worked as a member of anti-ragging Committee of Banaras Hindu University, Varanasi, 2011-12.
- Worked as a member of Publication Committee of Banaras Hindu University, Varanasi.
- Worked as member of Web Management Cell of Banaras Hindu University, Varanasi.
- Worked as a member of Admission Committee of MMV, Science & Arts, Banaras Hindu University, Varanasi.
- Worked as a member of Technical Committee of East Zone Inter University Badminton (M&W) Tournament 2014-2015, organized by University Sports Board, B.H.U.