Profile of Prof. Raghuraj Singh

 Name Father's Name Date of Birth Category Office Address 	 Raghuraj Singh Sh. Baboo Singh July 01, 1967 OBC Professor Department of Computer Science & Engin 	eering,
	Harcourt Butler Technical University, Kan	pur
	Kanpur (U.P.) -208002	
	Phone: 9415153745, 7081300638	
6. Residential Address	: Type-IV/D-8, West Campus,	
	HBTU Colony, Kanpur-208002	
	Contact No.: 9415153745, 7081300638	
7. Email Address	: raghurajsingh@rediffmail.com	

8. Educational Qualifications

Sr.	Examination Passed	Board/ University	Year of	% Marks	Division
No			Passing		
1.	Ph. D.(Computer Science	U. P. Technical	2006		
	& Engineering)	University, Lucknow			
2.	M. S. (Software Systems)	BITS, Pilani	1997	9.27/10	Ι
				(CGPA)	(Hons.)
3.	B. Tech.(Computer Science	HBTI, Kanpur	1990	78.3	Ι
	& Engineering)				(Hons.)
4.	B. Sc.	Gorakhpur University	1986	72.2	Ι
5.	Intermediate	U.P. Board	1984	68.6	Ι
6.	High School	U. P. Board	1982	68.4	Ι

Topic of the Ph.D. Thesis: Analysis and Design of Methodologies for Software Quality/Reliability Measures.

Sr.	Name of Employer	Designation & Pay Duration		Total
No.		Scale		Experience
1.	HBTU, Kanpur	Professor	18.01.2007	16 Years
		37400 - 67000	to	(Approx.)
		AGP: 10000	Till date	
2.	HBTI, Kanpur	Associate/Assistant	26.11.1998	8 Years & 2
		Professor	to	Months
		37400 - 67000	17.01.2007	
		AGP: 9000		
3.	C. R. State College of	Assistant Professor/	03.09.1991	7 Years & 3
	Engineering, Murthal,	Lecturer	to	Months
	Sonepat (Haryana)	2200-4000	25.11.1998	
		(unrevised)		
4.	Birla Technical Training	Assistant Professor/	17.08.1990	1 Year
	Institute, Pilani	Lecturer	to	
		2200 - 4000	31.08.1991	
		(unrevised)		

9. Professional Experience: (More than 32 Years)

10. Administrative Experience

(A). Present

• Dean, Planning & Resource Generation, Harcourt Butler Technical University, Kanpur since November 01, 2021.

(B). Previous

- Dean, Continuing Education and Internal Quality Assurance, Harcourt Butler Technical University, Kanpur during January 03, 2020 to September 14, 2021.
- **Co-ordinator**, Technical Quality Improvement Programme (TEQIP), Phase-III, Harcourt Butler Technical University, Kanpur during November 15, 2018 to September 30, 2021.
- Head of Department, Computer Science & Engineering Department, Harcourt Butler Technical University, Kanpur, January 31, 2018 to January 30, 2021.
- **Dean**, Planning & Resource Generation, Harcourt Butler Technical University, Kanpur since January 02, 2018 to January 02, 2020.
- **Director**, Kamla Nehru Institute of Technology, Sultanpur during October 29, 2014 to October 28, 2017.
- Nodal Officer, Indian Institute of Information Technology, Lucknow during February 2015 to October 28, 2017.
- Director (Mentor), Rajkiya Engineering College, Ambedkar Nagar, October 2014 to January 2015.
- Director (Mentor), Rajkiya Engineering College, Sonbhadra, October 2014 to April 2016.

- Head of Department, Computer Science & Engineering Department, HBTI Kanpur, February 06, 2013 to October 28, 2014.
- Controller of Examination, HBTI, Kanpur, January 2011 to October 2014.
- Nodal Officer, Dr. B. R. Ambedkar Engineering College of Information Technology (Presently Rajkiya Engineering College), Bijnor, April 2010 to January 2011.
- Head of Department, Computer Science & Engineering Department, HBTI, Kanpur, September 2007 to September 2010.
- Registrar, HBTI, Kanpur, May 2005 to May 2006.
- Assistant Dean, Students' Welfare, HBTI, Kanpur, January 2005 to June 2005.
- Chief Proctor, HBTI, Kanpur, January 2007 to March 2008.
- Secretary, Alumni Association, HBTI, Kanpur during April 2011 to March 2013.
- Additional Centre Incharge, UPSEE-2012 Counselling, HBTI, Kanpur.
- Chairman, OBC Scholarship Committee, HBTI, Kanpur & Dr. BRAECIT, Bijnor.
- Centre Incharge, UPSEE-2011 Counselling, HBTI, Kanpur.
- Officer Incharge, Central Library, HBTI, Kanpur, January 2011 to January 2012.
- Dy. Co-ordinator, UPSEE-2008 and UPSEE-2009 Counselling, HBTI, Kanpur.
- Co-ordinator, National Mission on Education through Information and Communication Technology project of Govt. of India, HBTI, Kanpur.
- Treasurer, Alumni Association, HBTI, Kanpur during the year 2007-08 and 2008-09.
- Public Information Officer, HBTI, Kanpur, September 2005 to May 2006.
- Programme Incharge, IGNOU Programme Study Centre, Computer Science & Engineering Department, HBTI, Kanpur, April 2003 to April 2005.
- Co-Coordinator, Sustainability Support Scheme of the IMPACT Project of Department of Electronics, Government of India.
- Head of Department, Computer Science and Engineering Department, HBTI Kanpur, July, 2001 to September, 2004.
- Member, Flying Squad, GBTU, UPSEE, CPMT & GGS Indraprastha University Engineering & Medical entrance examinations.
- Member, various Enquiry & other Committees, HBTI, Kanpur.
- Warden, Lake View III Hostel, HBTI, Kanpur for two years.
- Coordinator, IGNOU Programme Study Centre, Computer Science & Engineering Department, HBTI, Kanpur for two years.
- Deputy Registrar (General Admin.), C. R. State College of Engineering, Murthal (Sonepat) for one year.
- Warden, Boys Hostel, C. R. State College of Engineering, Murthal (Sonepat) for three years.

11. Major Accomplishments as Director, KNIT Sultanpur, Director (Mentor), REC Ambedkar Nagar & Sonbhadra and Nodal Officer REC Bijnor

- Introduction of Choice Based Credit System (CBCS), adhering to the academic calendar, timely declaration of B. Tech./MCA and M. Tech. results, providing mark sheets and degree timely and streamlining the submission and evaluation procedure of M. Tech. thesis.
- Completion of construction work of 03 Boys Hostels, underground electrical cabling of the entire campus, maintenance and upkeep of the Institute building, energy saving through solar lights and LED lights for the campus illumination, water drainage system and started construction of Transient Hostel & Campus Roads, 17 Rooms on the first floor of the Ramanujam hostel and renovation of the Guest House.
- Development of 04 Virtual Class Rooms containing facilities for e-learning, Remote Lecture and video conferencing etc.
- Organization of about 40 short term training programs, National conferences, Invited lectures, entrepreneurship development programs, and pedagogical programs etc.
- Organization of 07 International conferences and promotion of other R&D activities.
- Successful completion of selection process for promotion of 23 Faculty members under Career Advancement Scheme.
- Installation of Generator, RO, Water Coolers, and Wi-Fi facilities in the campus including hostels.
- Improvement in students training & career counselling and significant improvement of the placement status from 30% to almost 65%.
- Establishment of Innovation, Incubation and Startup Centre with the financial assistance from the Ministry of IT & Industry, Govt. of U.P.
- Regular organization of various curricular, co-curricular and extra-curricular activities like Anubhuti (Literary/Cultural), Effulgence (Technical), Tvaran (Sports) every year.
- Procurement of latest equipment for various laboratories and Computer, ACs, peripherals & software for the Computer Centre.
- Regular organization of Alumni Meet every year.
- Implementation of NPS for employees joined the Institute after 2004.
- Granting long pending arrears of Faculty and Staff and resolving the long pending issue of ACP of some Class-III employees of the Institute.
- Successful conduction of Academic Council, Finance Committee, BOG and Academic Audit Committee meetings regularly.
- Successful implementation of TEQIP-II objectives and approval of the TEQIP-III.
- Significant progress towards resolving long pending land issue of the Institute.
- Monitoring of construction work, looking after academic affairs and procurement of equipment for various labs of REC, Ambedkar Nagar as Director (Mentor).
- Monitoring of construction work of REC, Bijnor as Nodal Officer.

• Monitoring of construction work, managing and looking after various academic affairs of REC, Sonbhadra as Director (Mentor).

12. Major Accomplishments as Nodal Officer IIIT, Lucknow

- Monitoring of construction work.
- Arranging/Conduction of five meetings of the Board of Governors.
- Getting registration of the Institute in CSAB/JOSAA for admission through JEE (Mains).
- Coordinating with IIIT, Allahabad (Mentor Institute) for various academic and administrative affairs of the students/Institute.
- Preparation and submission of the detailed academic DPR of the Institute for approval of the BOG/Govt.

13. Projects Undertaken

- Worked as Principal Investigator of a project entitled "Design and Development of Internet Browsing System for Visually Challenged" sponsored by UGC, New Delhi under Major Research Project Scheme, Sanctioned amount 10.00 lakh.
- Worked as Coordinator of a project entitled "Advanced Software Development and Applications" sponsored by the AICTE, New Delhi under MODROBS scheme, Sanctioned amount 10.00 lakh.
- Worked as Chief Coordinator of a project entitled "Experimentation and Development of Software Reliability and Complexity Measurement Techniques", jointly sponsored by the MHRD, Government of India, and AICTE, New Delhi, Sanctioned amount 5.00 lakh.
- Carried out M.S. (Software Systems) Dissertation work on Software Metrics and developed a "Software Metrics Analysis & Testing Tool" for the analysis of software written in 'C' language.
- Guided a number of projects to the students of B. Tech. Computer Science & Engineering, Information Technology and MCA.

14. Membership / Affiliations of Professional Bodies / Institutions

- Life Member of the Indian Society for Technical Education (ISTE), No. LM21479.
- Fellow Member of the Institution of Engineers (India), No. F-117925-6.
- Fellow Member of the Institution of Electronics and Telecommunication Engineers (IETE), No. F160482.
- Professional member of Association for Computing Machinery (ACM), No. 3404445.
- Senior Member of the Computer Society of India (CSI), No. 00175767.
- Senior Member of International Association of Computer Science and Information Technology (IACSIT), Singapore.

- Lifetime Membership of Bhartiya Shikshan Mandal, Uttar Pradesh.
- Nominated as Margdarshak by the AICTE, New Delhi under its "MARGDARSHAK" Scheme since 16.11.2021.
- Member, Finance Committee, Rajkiya Engineering College, Mainpuri since September 08, 2021.
- Member, Institute Senate, Indian Institute of Information Technology (IIIT), Lucknow.
- Member, Selection Committee of Directors, Rajkiya Engineering Colleges at Banda, Bijnor, Azamgarh and Ambedkar Nagar.
- Member, Selection Committee of Director, Uttar Pradesh Textile Technology Institute, Kanpur.
- Member/AICTE representative, Faculty Selection Committee, Rajkiya Engineering College, Azamgarh (U.P.).
- Member, Board of Governors, Rajkiya Engineering Colleges at Ambedkar Nagar, Kannauj, Sonbhadra and Mainpuri.
- Member, Board of Governors, Uttar Pradesh Textile Technology Institute, Kanpur.
- Member, Administrative Committee, Rajkiya Engineering College, Ambedkar Nagar from 16.06.2017 to 15.06.2020.
- Member, Executive Council, Dr. A.P.J. Abdul Kalam Technical University, Uttar Pradesh, Lucknow.
- Member/AICTE representative, Administrative Council, Uttar Pradesh Textile Technology Institute, Kanpur.
- Member, Expert Committee, UGC, New Delhi for inspection of Universities and Deemed to be Universities.
- Member, Expert Committee, National Board of Accreditation (NBA), AICTE, New Delhi.
- Member, Board of Studies, Computer Science & Engineering, Information Technology and MCA programmes, U. P. Technical University, Lucknow.
- Member, RDC, Computer Science & Engineering, U. P. Technical University, Lucknow.
- Expert, Selection Committees for various posts at IIT, Kanpur.
- Member, Board of Studies, Computer Science & Information Technology, MJP Rohilkhand University, Bareilly.
- Member, Board of Studies, Department of Information Technology, UIET, CSJM University, Kanpur.
- Member, Board of Studies, MCA Department, UIET, CSJM University, Kanpur.
- Member, Executive Committee, Joint Entrance Examination Council, U.P.
- Member, Academic Advisory Body, ACME College of Engineering, Ghaziabad.
- Member, Board of Governors, IEC College of Engineering & Technology, Gautam Buddh Nagar, Greater Noida.

- Chairman, Computer Society of India (CSI), Kanpur Chapter since March, 2013.
- Member, RDC, Computer Science & Engineering, Uttarakhand Technical University, Dehradun.
- Technical Expert, Computer Science & Engineering, U.P. Public Service Commission, Allahabad.
- Technical Expert, Computer Science & Engineering, M.P. Public Service Commission, Bhopal.
- Member, Board of Studies, Computer Science & Engineering, Bundelkhand Institute of Engineering and Technology, Jhansi.
- Member, Board of Governors, Bundelkhand Institute of Engineering and Technology, Jhansi for the year 2013-14.
- Member, Board of Studies, Rama University, Uttar Pradesh, Kanpur.

15. Ph.D. Supervision: 26

Completed: 14

- Dr. Rohit Sharma (15CSE2117/2015), "Reliability Estimation Issues in Cloud Management Systems", Dr. A.P.J. Abdul Kalam Technical University, Lucknow, January 2023.
- Dr. Priyanka Pandey (180304006/2018), "Performance Enhancement of Routing Algorithms in Mobile Adhoc Network", Harcourt Butler Technical University, Kanpur, November, 2022.
- Dr. Rekhnath Singh (Ph.D./13/CSE/1631), "Semantic Integration of Distributed Databases", Dr. A.P.J. Abdul Kalam Technical University, Lucknow, March 2020.
- Dr. Prashant Kumar Mishra (Ph.D./13/CSE/1162), "Issues of Reliability in Mobile Agent based Systems", Dr. A.P.J. Abdul Kalam Technical University, Lucknow, June 2018.
- Dr. C. S. Yadav (Ph.D./08/CSE/639), "Software Metrics Set for Object Oriented Software", Dr. A.P.J. Abdul Kalam Technical University, Lucknow, February 2016.
- Dr. Shubha Jain (10001001068), "Measurement and Metrics for Object Oriented Software using Predictive Object Points", Uttarakhand Technical University, Dehradun, February 2016.
- Dr. Anita Yadav, "Quality of Services (QoS) in Mobile Adhoc Networks Based on Link Prediction", Dr. A.P.J. Abdul Kalam Technical University, Lucknow, January 2016.
- Dr. Sukhdeep Singh, "Development of Methodologies for Testability Measures and Metrics of Object Oriented Software", Maharshi Dayanand University, Rohtak, 2014.
- Dr. Vibhash Yadav (10001001052), "Assessment of Design/Quality Measures of Object Oriented Software", Uttarakhand Technical University, Dehradun, December 2013.
- Dr. Prabhat Verma, "Speech as Interface in Web-applications for Visually Challenged", Uttarakhand Technical University, Dehradun, January 2013.

- Dr. B. K. Sharma (SU/SCE&IT/Ph.D./PT/09/01-2009060001), "Watermarking for Copyright Protection for Software Codes", Shobhit University, Meerut, 2012.
- Dr. Devesh Srivastava (09001001056), "Analysis and Design of Software Metric through Object Oriented Software Reengineering", Uttarakhand Technical University, Dehradun, 2012.
- Dr. Nanhay Singh, "Applications of Intelligent Web Mining Techniques and Web Traffic in Analysis of Modelling of Web Marketing Strategies", Kurukshetra University, Kurukshetra, 2012.
- Dr. K. P. Yadav, "Analysis and Design of Core Metrics for Modern Software Projects", Corllins University, USA, 2009.

In Progress: 12

- Rohit (16CSE2194/2016), "Qualitative Analysis of Quality of Object Oriented Software", Dr. A.P.J. Abdul Kalam Technical University, Lucknow.
- Vijay Yadav (15CSE1871/2015), "Role of Predictive Object Point Metrics in Object Oriented Software Engineering", Dr. A.P.J. Abdul Kalam Technical University, Lucknow.
- Danish Ather (15CSE1871/2015), "Optimized Simplified Routing Algorithm for Handover Management in VANETS across Heterogeneous Networks", Dr. A.P.J. Abdul Kalam Technical University, Lucknow.
- Sarang Anil Saoji (15CSE1855/2015), "Image Processing Based Intelligent Approach to Automate Reticulocyte Count and Mine Its Clinical Implications in Sickle Cell Disease Patients", Dr. A.P.J. Abdul Kalam Technical University, Lucknow.
- Rishika Yadav (15CSE1851/2015), "Analysis and Design of Advanced Optimization Techniques for Solving Coverage Problem and Congestion Control in Wireless Sensor Networks", Dr. A.P.J. Abdul Kalam Technical University, Lucknow.
- Shilpi Khanna (226472767/2022), "Improvement of Estimation Efficiency of Estimation Models using Machine Learning", Harcourt Butler Technical University, Kanpur.
- Diksha Shukla (210304002/2021), "Quality of Service Based Routing in Mobile Ad Hoc Network", Harcourt Butler Technical University, Kanpur.
- Sneha Khoria (210304004/2021), "Formal development of symbolic Neural Network using Event B", Harcourt Butler Technical University, Kanpur.
- Kaushalendra Kumar (210304005/2021), "Feature Based Sentiment Analysis using Machine Learning", Harcourt Butler Technical University, Kanpur.
- Vikash Kumar (210304006/2021), "Detection of Camouflage Intruder and Priority Transmission over AF Network", Harcourt Butler Technical University, Kanpur.
- Avinash Chandra Mani (200304006/2020), "Improvement of Reliability of Embedded Safety Critical Application Software", Harcourt Butler Technical University, Kanpur.

• Sumit Babu (180304008/2018), "Development of Metrics and Models for Design Quality Assessment of Object Oriented Software", Harcourt Butler Technical University, Kanpur.

16. M. Tech. Supervision: 27

- Sakshi Verma, "A Computer Assisted Assessment Tool for Personal Behavioral Interviews", Banasthali Vidyapeeth, Jaipur Campus, Rajasthan, June 2016.
- Priyanka Pandey, "Code Refactoring as a Means of Improving Quality of Object Oriented Software", Dr. A.P.J. Abdul Kalam Technical University, Lucknow, January 2016.
- Vinay Prakash, "A Case Study of Energy Issues and Energy aware Routing Protocols in MANET for Network Performance Management", Dr. A.P.J. Abdul Kalam Technical University, Lucknow, January, 2016.
- Subhendra Singh, "Quality Assessment of Object Oriented Software at the Design Level", NITTTR, Chandigarh, 2015.
- Neeraj Kumari, "Evaluation of Metrics and Assessment of Quality of Object Oriented Software", U.P. Technical University, Lucknow, 2014.
- Pratibha, "Direct Speech-Enabling the Public Utility Websites", Banasthali Vidyapeeth, Rajasthan, April 2014.
- Rekha Rani Tiwari, "Direct Speech-Enabling the Public Utility Websites", Banasthali Vidyapeeth, Rajasthan, April 2014.
- Divya Mishra, "Dependence Clusters in Object Oriented Programming Paradigm", Banasthali Vidyapeeth, Rajasthan, April 2014.
- R. P. Pandey, "To implement an architecture for making transferable e-cash schema and showing comparative study on different technologies", G. B. Technical University, Lucknow, 2014.
- Avinash Singh, "2-D Cursor Movement and Target Selection using EEG Based Brain Computer Interface", M. S. Software Systems, BITS, Pilani, December 2013.
- Pradeepika Verma, "Design and Development of Browsing System for Visually Challenged in Indian Context", Banasthali Vidyapeeth, Rajasthan, April 2013.
- Shilpa Tiwari, "Design and Development of Browsing System for Visually Challenged: Hindi Synthesizer", Banasthali Vidyapeeth, Rajasthan, April 2013.
- Danish Ather, "Transforming Sequential 'C' Applications to KAHN Process Network", G.B. Technical University, Lucknow, February, 2013.
- Haridarshini, "An Algorithm for Improving Quality Parameters for MANET Routing Protocol", G.B. Technical University, Lucknow, December 2013.
- Shilpi Khanna, "Modeling and Verification of Real-Time ATM Transactions using Unified Modeling Language", G.B. Technical University, Lucknow, 2012.

- Deepak Swain, "Fault-Tolerant Scheduling Techniques for Grid Computing Systems", G.B. Technical University, Lucknow, 2011.
- Pradeepta Kumar Sarangi, "Short Term Load Forecasting using Back Propagation Algorithm of Artificial Neural Networks: A Comparison with Genetic Algorithm Implementation", G.B. Technical University, Lucknow, 2011.
- Ritesh Khanna, "A Fuzzy Logic Based Improved Method for assessment of Function Points", G.B. Technical University, Lucknow, 2011.
- Ashish Sharma, "Study and Analysis of Density based Clustering Algorithms in Data Mining", U.P. Technical University, Lucknow, 2010.
- Prashant Mishra, "Design and Development of an Improved Software Complexity Metric", U.P. Technical University, Lucknow, 2010.
- Ankur Shree Agarwal, "Analysis & Design of a Framework for Domain-Specific Interface Mapper on Hidden Database", U.P. Technical University, Lucknow, 2010.
- Rakesh Dwivedi, "MVDR Beamformer Implementation on GPU (Graphical Processing Unit) -A case study for parallelizing real time system for performance improvement", U.P. Technical University, Lucknow, 2010.
- Deepak Verma, "A Trust and Load Balancing Peer to Peer System", U.P. Technical University, Lucknow, 2010.
- Priya Mishra, "Analysis and Development of an Enhanced approach for Effective whole Path Impact", U.P. Technical University, Lucknow, 2010.
- Prabhat Verma, "A Quality Assessment Model for Object Oriented Software System", U.P. Technical University, Lucknow, 2008.
- Mamta Tiwari, "Implementation and Analysis of Software Reliability Allocation Models", U.P. Technical University, Lucknow, 2006.

17. Patent: 01

Granted and registered in the Register of Patents an Australian Patent on INHA-Combined Health Monitoring: Intelligent IOT Based Combined Health Monitoring, Notification, Alert, Home Automation System, Patent No. 2020103214, Inventor: Raghuraj Singh, Danish Ather, Vibhash Yadav et. al., December 23, 2020.

18. Research Papers / Publications: 165 International Journals: 101

 Vijay Yadav, Raghuraj Singh, "Estimation Model for Enhanced Predictive Object Point Metric in OO Software Size Estimation using Deep Learning", International Arab Journal of Information Technology (ISSN: 1683-3198, e-ISSN: 2309-4524), SCOPUS and SCIE Indexed, Vol. 20, No. 3, May 2023. ---To be published.

- Rohit Yadav, Raghuraj Singh, "Software maintainability prediction: A class level classification model using tuned hyperparameter Support Vector Machine", Journal of Information Technology Management (Print ISSN: 2008-5893, Online ISSN: 2423-5059), SCOPUS indexed, December 2022. --- Accepted for Publication
- Chandra Shekhar Yadav, Raghuraj Singh, Sambit Satpathy, S. Baghavathi Priya, B.T. Geetha and Vishal Goyal, "Energy Efficient and Optimized based Genetic Algorithm for Software Effort Estimator using Double Hidden Layer Bi-directional Associative Memory", International Journal of Sustainability Energy Technologies and Assessments, SCIE Indexed (Impact Factor: 7.632), Elsevier Publication, Vol. 56, March 2023. DOI: https://doi.org/10.1016/j.seta.2022.102986
- Sumit Babu and Raghuraj Singh, "Neural Network Based Model for the Quality Assessment of Object Oriented Software", International Journal of Open Source Software and Processes (ISSN: 1942-3926, EISSN: 1942-3934), SCOPUS Indexed, IGI Global Publisher, Volume 13, Issue 1, pp. 1-13, October 2022. DOI: <u>10.4018/IJOSSP.313182</u>
- Priyanka Pandey and Raghuraj Singh, "Efficient Ad Hoc On Demand Distance Vector Routing Protocol Based on Route Stability in MANETs", International Journal of Wireless Information Networks (ISSN Electronic: 1572-8129, Print: 1068-9605), SCOPUS & SCImago Indexed, Springer Nature Publication (US), Vol. 29 No. 3, pp. 393-404, September 2022, DOI: <u>https://doi.org/10.1007/s10776-022-00570-x</u>
- Rohit Yadav, Raghuraj Singh, "Ranking of Measures for the Assessment of Maintainability of Object-Oriented Software", Journal of Optoelectronics Laser (ISSN: 1005-0086), SCOPUS and UGC CARE Indexed, Vol. 41, No. 8, pp. 366-376, August 2022. DOI: http://gdzjg.org/index.php/JOL/article/view/934
- Rohit Sharma, Prateek Gupta and Raghuraj Singh, "Resource provisioning optimization for cloud computing systems serving multi-class requests", International Journal of Ad Hoc and Ubiquitous Computing (ISSN online: 1743-8233, Print: 1743-8225), SCIE indexed, Inderscience Publication, Vol. 40, No. 4, June 2022. DOI: <u>10.1504/IJHUC.2022.10048906</u>.
- Rohit Sharma, Prateek Gupta and Raghuraj Singh, "Hypergeometrically Represented Responsive and Reliable Cloud Service Model for Personal and Private Clouds", Wireless Personal Communications (ISSN: 1572-834X (Electronic), 0929-6212 (Print)), SCIE Indexed, Springer Nature Publication, March 2022. DOI: <u>https://doi.org/10.1007/s11277-022-09618-w</u>.
- Danish Ather, Raghuraj Singh, and Ravi Shanker Shukla, "Routing Protocol for Heterogeneous Networks in Vehicular Adhoc Network for Larger Coverage Area", Journal of Engineered Science (ISSN: 2576-988X, E-ISSN: 2576-9898), SCOPUS Indexed, Cite Score 9.0, Vol. 17, pp. 266-273, January 2022. DOI: <u>https://doi.org/10.30919/es8d605.</u>
- 10. Priyanka Pandey and Raghuraj Singh, "Advanced AODV Routing based on Restricted Broadcasting of Route Request Packets in MANET", International Journal of Information

Technology (ISSN Electronic: 2511-2112, Print: 2511-2104), **SCOPUS Indexed**, Springer Nature Publication, September 2021. DOI: <u>https://doi.org/10.1007/s41870-021-00818-4</u>.

- Rohit Sharma and Raghuraj Singh, "Performance Evaluation & Reliability Analysis of Predictive Hardware Failure Models in Cloud Platform using ReliaCloud-NS", International Journal of Cloud Computing (ISSN: online2043-9997, print 2043-9989), Scopus Indexed, Inderscience Publication. Vol. 10, No. 3, pp. 207-224, September 2021. DOI: <u>https://doi.org/10.1504/IJCC.2021.10041441.</u>
- Priyanka Pandey and Raghuraj Singh, "Efficient Route Selection Scheme in MANET using Enhanced AODV Protocol", Wireless Personal Communications (ISSN: 1572-834X (Electronic), 0929-6212 (Print)), SCIE Indexed, Springer Nature Publication, September 2021, DOI: <u>http://link.springer.com/article/10.1007/s11277-021-09165-w</u>.
- Rekhnath Singh, Raghuraj Singh, "Performance Evaluation of Novel Dynamic Data Replication Algorithm under Optical Burst Switching", Journal of Optical Communications (ISSN: 2191-6322), Scopus Indexed, Vol. 42, Issue 3, pp. 535-543, July 2021, DOI: https://doi.org/10.1515/joc-2018-0132.
- Priyanka Pandey and Raghuraj Singh, "An Efficient and Stable Routing Algorithm in Mobile Ad Hoc Network", International Journal of Computer Networks & Communications (E-ISSN: 2308-9830), Scopus Indexed, Vol. 13, No. 4, pp. 21-37, July 2021, DOI: <u>https://doi.org/10.5121/ijcnc.2021.1340221.</u>
- Rohit Sharma and Raghuraj Singh, "A Highly Reliable and Cost Effective Service Model for Finite Population Clouds: Analysis and Implementation", Arabian Journal of Science and Engineering (ISSN: 2191-4281), SCIE Indexed, Springer Nature Publication, Vol. 47, No.2, pp. 1181-1196, June 2021, DOI: <u>https://doi.org/10.1007/s13369-021-05813-2</u>
- 16. Prashant Kumar Mishra, Raghuraj Singh, Vibhash Yadav, "Improving Reliability in MAS by Rule Based Logic and Cryptographic Techniques", International Journal of Advanced Intelligence Paradigms (ISSN: 1755-0386), Scopus Indexed, Vol. 16, No. 3/4, pp. 285-305, May 2020.
- Danish Ather, Raghuraj Singh, Ravi Shanker Shukla, "An Optimized Handover Mechanism for VANETS", International Journal of Advanced Science and Technology", Scopus Indexed, Vol. 29, No. 8S, pp. 1967-1972, April 2020.
- Rishika Yadav, Raghuraj Singh and M. Nambiar, "Multi Objective Optimization in Wireless Sensor Network", Test Engineering and Management, SCImago and Scopus Indexed, Vol. 83, pp. 598-602, March 12, 2020.
- Danish Ather, Raghuraj Singh, Ravi Shanker Shukla, "An Efficient Route Maintenance Routing Algorithm for VANETS", International Journal of Recent Technology and Engineering (ISSN: 2277-3878)", Scopus Indexed, Vol. 8, Issue 4, pp. 4921-4925, Nov. 2019.

- 20. Vijay Yadav, Vibhash Yadav and Raghuraj Singh, "Automated Estimation of Predictive Object Points Metric Values for Object Oriented Code", International Journal of Recent Technology and Engineering, Scopus Indexed, Vol. 8, Issue 2S6, pp. 886-891, July 2019.
- Rekhnath Singh, Raghuraj Singh, "Advanced Pre-fetching Based Dynamic Data Replication under Small World Network Model", International Journal of Integrated Engineering, Scopus Indexed, Vol. 11, No. 01, pp. 45-54, May 2019.
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- 24. Anil Kumar Yadav, Rahguraj Singh and R.S. Yadav, "Algebraic Connectivity for the Construction of Backbone in Wireless Ad hoc Network", IEEE International Conference on Artificial Intelligence and Soft Computing (AISC-2012), IIT-BHU, Varanasi, 2012.
- 25. Prabhat Verma and Raghuraj Singh, "A Framework for Performance Evaluation of Internet Assistive Tools for Blind Users", International Conference on Advances in Electronics, Electrical and Computer Science Engineering (EEC-2012) organized by the Institute of Engineers and Doctors, and Uttarakhand Technical University, Dehradun, July 7-9, 2012.
- 26. Vibhash Yadav and Raghuraj Singh, "Validating Object Oriented Design Quality using Software Metrics", International Conference on Advances in Electronics, Electrical and Computer Science Engineering (EEC-2012) organized by the Institute of Engineers and Doctors, and Uttarakhand Technical University, Dehradun, July 7-9, 2012.
- 27. B. K. Sharma, R. P. Agrawal, and Raghuraj Singh, "An Efficient Software Watermark by Equation Reordering and FDOS", International Conference on Soft Computing for Problem Solving (SocPros-2011), organized by I.I.T. Roorkee, December 20-22, 2011.
- Anil Yadav, Rama Shanker Yadav, and Raghuraj Singh, "Topology Control in Wireless Ad Hoc Networks", International Conference on Soft Computing for Problem Solving (SocPros-2011), organized by I.I.T. Roorkee, December 20-22, 2011, URL: https://link.springer.com/chapter/10.1007/978-81-322-0487-9_85.
- 29. Raghuraj Singh and C. S. Yadav, "Reliability of Object Oriented Systems with Markov Transfer of Control", International Conference on Computer and Management CAMAN-2011, organised by IEEE Wuhan Section & Wuhan University, Wuhan, China, published in IEEE Explore, Page 1-3, May 19-21, 2011.
- 30. Anil Kumar Yadav, Raghuraj Singh, and Ashutosh Singh, "A Novel Approach for Energy Management in Wireless Ad-hoc Network by Topology Control", Information and

Communication Technology World Congress (WICT-2011), organized by IEEE Mumbai, published in IEEE Explore, Print ISBN 978-1-4673-0127-5, page 1334-1339, December 11-14, 2011.

- 31. Anil Kumar Yadav, Rama Shankar Yadav, Raghuraj Singh, "Efficient Construction of Connected Dominating Set in Wireless Ad hoc Network," International Conference on Advances in Modeling, Optimization and Computing (AMOC-2011), IIT, Roorkee, December 5-7, 2011.
- 32. Shruti Sandal, Raghuraj Singh, Abdul Jabbar Khilji, Shashi Shekhar Ranga, Sanjay Tejasvee, Devendra Gahlot, "The preliminary investigation of template with C++", International Conference on Methods and Models in Science and Technology (ICM2ST-2010), Vol. 1324, Issue 1, Page 54-56, Published by AIP Publishing, November 06, 2010.
- 33. Prabhat Verma, Raghuraj Singh, Avinash Kumar Singh, Vibhash Yadav, and Aditya Pandey, "An Enhanced Speech-based Internet Browsing System for Visually Challenged", IEEE International Conference on Computer & Communication Technology (ICCCT-2010), Page 724-130,MNNIT, Allahabad, September 17-19, 2010.
- 34. Raghuraj Singh, Prabhat Verma, Vibhash Yadav, and Avinash Singh, "TC-GXML-A Transcoder for HTML to XML Grammar", Published in IEEE Explore and presented in International Conference on Data Storage and Data Engineering (DSDE-2010), Bangalore, Page 34-38, February 9-10, 2010.
- 35. Chandra Shekhar Yadav, Raghuraj Singh, "Software Metrics Set for Object Oriented System", International Conference on Computing Update and Trends, February 6, 2010.
- 36. Raghuraj Singh, Prabhat Verma, Vibhash Yadav, and Avinash Singh, "WACTA: A Speechbased Web Browser for Visually Challenged", Published by Springer and presented at Second IEEE International Conference on Intelligent Human Computer Interaction (IHCI-2010), IIIT, Allahabad, January 16-18, 2010.
- 37. Pradeepta Kumar Sarangi, Nanhay Singh, R. K. Chauhan, and Raghuraj Singh, "Short Term Load Forecasting Using Artificial Neural Network",1st International Conference on Management of Technologies & Information Security (ICMIS-2010), IIIT, Allahabad, January 21-24, 2010.
- 38. Vibhash Yadav, Prabhat Verma, N. N. Das and Raghuraj Singh, "Key Factors for Increase of Design Quality in Rule Based Object Oriented Software", IEEE International Conference on Innovative Technologies (ICIT-2009), Page 322, P. D. M. College, Bahadurgarh, Haryana, June 18-19, 2009.
- 39. Anant Ram, Ashish Sharma, Raghuraj Singh, Anand S. Jalal, and Ankur Agarwal, "An Enhanced Density Based Spatial Clustering of Applications with Noise", Proceedings of IEEE International Advance Computing Conference (IACC 2009), Page 3731-3734, Thapar University, Patiala, India, March 6-7, 2009.

- 40. Prabhat Verma, Vibhash Yadav, and Raghuraj Singh, "Use of Dependence Matrix for Assessment of Object Oriented Software Design Quality", IEEE International Advance Computing Conference (IACC 2009), Page 2351-2354, Thapar University, Patiala, India, March 6-7, 2009.
- 41. Raghuraj Singh, Yogesh Singh, and Onkar Singh, "Genetic Algorithm Based Methodology for Software Reliability Allocation", SCRA2004: International Conference on Interdisciplinary Mathematics, Lucknow, December 27-29, 2004.

National Journals: 04

- 1. B. K. Sharma, R. P. Agarwal, and Raghuraj Singh "Watermarking techniques for RDBMS" Published in Journal of Computer Application (JCA), AKG Engineering College, Ghaziabad, Volume 4, March 2012.
- 2. C. S. Yadav and Raghuraj Singh, "Performance Evaluation of Information Systems", NIET Journal (Engineering & Technology), pp. 63-65, Autumn 2010.
- Raghuraj Singh, Yogesh Singh, and Onkar Singh, "A Methodology for Ranking of Software Reliability Measures", Journal of The Institution of Engineers, Computer Science Division, Vol. 87, pp. 14-20, November 2006.
- Raghuraj Singh, Yogesh Singh, and Onkar Singh, "A Hierarchical Model for Design Reliability Assessment of Modular Design Based Software", ICFAI Journal of Systems and Management, Vol. III, No. 2, pp. 20-29, May 2005.

National Conferences: 19

- Rohit Sharma and Raghuraj Singh, "A Comprehensive Review on Improving Cloud Reliability", Proceedings of the National Conference on Intelligent Computing, Communication and Data Science (NCICCD-2018), organized by the Department of Computer Science & Engineering, HBTU, Kanpur, Page 1-5, Nov. 29-30, 2018.
- Priyanka Pandey and Raghuraj Singh, "Comprehensive Study of Routing Protocols in MANET", Proceedings of the National Conference on Intelligent Computing, Communication and Data Science (NCICCD-2018), organized by the Department of Computer Science & Engineering, HBTU, Kanpur, Page 29-31, Nov. 29-30, 2018.
- Rekh Nath Singh and Raghuraj Singh, "MPDDRA: Modified Pre-fetching Based Dynamic Data Replication Algorithm in Distributed Sites", Proceedings of the National Conference on Intelligent Computing, Communication and Data Science (NCICCD-2018), organized by the Department of Computer Science & Engineering, HBTU, Kanpur, Page 91-95, Nov. 29-30, 2018.
- 4. Avinash Chandra Mani and Raghuraj Singh, "Internet of Things: Issues and Challenges", Proceedings of the National Conference on Intelligent Computing, Communication and Data

Science (NCICCD-2018), organized by the Department of Computer Science & Engineering, HBTU, Kanpur, Page 103-108, Nov. 29-30, 2018.

- 5. Vijay Yadav, Vibhash Yadav, and Raghuraj Singh, "Identifying the Relationship between Original and Refined POP Metrics for OO Software", Proceedings of the National Conference on Computing, Communication, Control and Informatics (NC⁴I-2016) organized by Kanpur Institute of Technology, Kanpur during November 5-6, 2016.
- Rekh Nath Singh, and Raghuraj Singh, "A Survey on Semantic Integration in Distributed Database System", Proceedings of the National Conference on Computing, Communication, Control and Informatics (NC4I-2016) organized by Kanpur Institute of Technology, Kanpur during November 5-6, 2016.
- Raghuraj Singh, "Reliability Issues in Software Development Process", Proceedings of National Conference on "Information Security and Software Engineering" organized by Department of Computer Science, University of Lucknow, Lucknow, Page 51-57, March 10-11, 2014.
- Anita Yadav, Y. N. Singh, and Raghuraj Singh, "Dynamic Power Control Wireless MAC Protocol for Adhoc Networks", Proceedings of the National Level Seminar on "Internet Security and Cyber Laws" organised by Department of Computer Science & Engineering, HBTI Kanpur, Page 99-102, April 5-6, 2014.
- Sandeep Singh, Anita Yadav and Raghuraj Singh, "A Survey of Inbuilt DDOS Defence Mechanism in Mainstream Operating Systems", Proceedings of the National Level Seminar on "Internet Security and Cyber Laws" organised by Department of Computer Science & Engineering, HBTI Kanpur, Page 167-170, April 5-6, 2014.
- 10. B. K. Sharma, R. P. Agarwal and Raghuraj Singh, "An IPR of an Image using Watermarking", Proceedings of Second National Conference on Global Trends and Innovations in Computer Applications & Information (CICON-2011), April 9-10, 2011.
- 11. B. K. Sharma, R. P. Agarwal and Raghuraj Singh, "An Intellectual Property Right of Software Codes using Watermarking for Structured Programming", Proceedings of First National Conference on Emerging Trends in Advanced Computing and Informatics, Shobhit University, Meerut, May 08-09, 2010.
- 12. B. K. Sharma, R. P. Agarwal and Raghuraj Singh, "A New Technique for Copyright Protection of Software Codes using Watermarking", Proceedings of National Conference on Recent Developments in Engineering Mathematics and Information Technology (NCRDEM-IT 2009), Poornima Engineering College, Jaipur, December 25-26, 2009.
- 13. Dilkeshwar Pandey, Meena Chauhan and Raghuraj Singh, "How to Design an Effective Mobile Agent", Proceedings of National Conference on Technologies and Trends in Advance Computing, Ideal Institute of Technology, Ghaziabad, May 02-03, 2008.

- 14. Prabhat Verma, Vibhash Yadav and Raghuraj Singh, "A Quality Suite for Rule Based Object Oriented Systems", Proceedings of National Conference on Information Security & Mobile Computing, ABES Engineering College, Ghaziabad, February 03-04, 2008.
- 15. Anita Yadav, Vibhash Yadav and Raghuraj Singh, "Security in Mobile Adhoc Networks", Proceedings of National Conference on Information Security & Mobile Computing, ABES Engineering College, Ghaziabad, February 03-04, 2008.
- 16. Narendra Kohli and Raghuraj Singh, "Impact of Information Technology on Education-A Case Study", Proceedings of Eighteenth Indian Engineering Congress: Role of Engineers in All-Round Development of the Nation, December 19-21, 2003.
- Raghuraj Singh, Upmanyu Misra, Tushar Chandra and Ushhan D. Gundevia, "Fuzzy Logic, Control and it's Automotive Applications", Proceedings of National Seminar on Soft Computing, Jodhpur, February 15-17, 2002.
- 18. Raghuraj Singh, "Cyclomatic Complexity Through Control Flowgraph", Proceedings of National Seminar on Efficient use of Electric Motors, Generators and Drives for Industries and Utilities for the purpose of achieving saving in Energy, C. R. State College of Engineering, Murthal (Sonepat), February 16, 1997.
- Raghuraj Singh, "Concurrent Read and write Operations in AVL Trees", Proceedings of National Symposium on Computer Applications in Management & Modern Technological Developments, Regional Engineering College, Kurukshetra, October 13, 1996.

Sr.	Consultancy Project	Funding	Amount	Duration	Principal
No.		Agency	Sanctioned		Investigator
1.	Evaluation/Inspection	Kanpur Smart	118000.00	3 Months	Dr. Raghuraj Singh
	(Vetting) of the	City Ltd.,		(April/May	Dr. Anita Yadav
	Estimate/RFP for the	Kanpur.		2022)	
	proposed work of				
	Integration of Electric				
	Buses with ICCC & E-				
	BUS Mobile App				
	Development under				
	Kanpur Smart City				
	Ltd., Kanpur				
2.	Technical Scrutiny of	Jhansi Smart	0.25 % of the	5 Months.	Dr. Raghuraj Singh
	DPR of various	City Ltd.,	Total value of	Nov. 2018	Dr. Anita Yadav
	infrastructure and other	Jhansi Nagar	work=36.40	to March	
	development projects	Nigam, Jhansi	Lakh+18%	2019	

19. Consultancy Activities

	under Smart City		GST(Approx.)		
	Mission for Jhansi				
3.	Inspection, Evaluation	Kanpur Smart	0.35% of the	01 Year	Dr. Raghuraj Singh
	and Audit of various	City Limited,	Total Value		
	infrastructure and other	Kanpur	(255.22 Cr.) of		
	development projects		work = 89.327		
	under Kanpur Smart		Lakh+18%		
	City Ltd., Kanpur		GST (Approx.)		
4.	Indira Gandhi National	Academic	-	Since July	Dr. Raghuraj Singh
	Open University, Delhi	consultancy		2000	
		(counselling of			
		BCA and MCA			
		Programmes)			

20. Reviewer of the Journals, Books & Conferences: 45 Reviewer of the Journals: 13

- Reviewer, International Journal of Computer Networks and Communications, SCOPUS Indexed, an open access peer reviewed journal of AIRCC Publishing Corporation.
- Reviewer, International Journal of Graphs and Combinatorics, SCI Indexed, an open access journal of Taylor & Francis Publishers.
- Reviewer, International Journal of Adhoc and Ubiquitous Computing (IJAHUC), SCOPUS Indexed, ISSN Print 1743-8225, Inderscience Publishers.
- Editor-in-Chief, International Journal of Forensic Software Engineering (IJFSE), Inderscience Publishers.
- Member, Editorial Board, International Journal of Computing, Intelligent and Communication Technology (ISSN 2319-748X) Published by Consilio Intelligence Research Lab.
- Member, Advisory Board, International Journal of Research Trends in Computer Science & Information Technology (ISSN: 2455-6513).
- Patron, MATRIX Academic International Online Journal of Engineering and Technology (Online ISSN: 2348-3326), Impact Factor: 0.665.
- Member, Editorial Board, and Reviewer, "International Journal of Software Engineering, Technology and Applications (IJSETA)", published by Inderscience Publishers.
- Reviewer, International Journal of Computer Theory and Engineering (IJCTE), a scholarly open access, peer-reviewed, interdisciplinary, quarterly and fully refereed journal published by the International Association of Computer Science and Information Technology (IACSIT), Singapore.

- Reviewer, International Journal of the Physical Sciences (IJPS) (ISSN 1992-1950) an open access and peer-reviewed monthly journal published by the Academic Journals.
- Reviewer, Journal of Mathematics and Systems Sciences published by the Kurukshetra University, Kurukshetra, Haryana.
- Reviewer, Central European Journal of Computer Science, ISSN: 1896-1533 (print version), ISSN: 2081-9935 (electronics version), published by Versita: Emerging Science Publishers, Co-published with Springer Verlag.
- Reviewer, International Journal of Advanced Computer Science and Applications (IJACSA) U.S. ISSN: 2156-5570(Online) and U.S. ISSN: 2158-107X (Print), published by The Science and Information Organization, USA.

Reviewer of the Books: 10

- Three chapters of the book titled "Data Science and Machine Learning", published by McGraw-Hill Education India Publication, June 2020.
- Two chapters of the book titled "Database Management Systems", published by Oxford University Press.
- Two chapters of the book titled "Software Project Management", by M. Cotterell published by McGraw-Hill Education India Publication.
- Four chapters of the book "Software Engineering: A Practitioner's Approach" by R. S. Pressman, sixth edition, published by McGraw-Hill Education India Publication.
- Book titled "Object Oriented Software Engineering: Practical Software Development using UML and Java" by T. C. Lethbridge and R. Langaniere published by McGraw-Hill Education India Publication.
- Book titled "Theory of Automata and Formal Languages" published by Cengage Learning Publication.
- Book titled "Software Engineering" by Stephen Schach" published by McGraw-Hill Education India Publication.
- Four chapters of the script of a book "Programming Languages" published by McGraw-Hill Education India Publication.
- Three chapters of the script of a book "Formal Languages and Automata Theory", published by McGraw-Hill Education India Publication.
- Three chapters of the script of a book "Client/Server based Projects", published by Orient Black Swan Private Limited formerly Universities Press, Hyderabad.

Books and Book Chapters: 04

- Customized a book titled "Computer Concepts and Programming in C" as per the syllabus of subject code ECS-101/201 of G.B. Technical University, Lucknow and Mahamaya Technical University, NOIDA.
- Book Chapter "Advanced and Recent Teaching Technologies in Technical/Higher Education", in the book entitled "Elements of Teaching Learning Process", Elsevier Publications, 2014.
- Book Chapter "Real-Time Framework Competitive Distributed Dilemma" by Vijay Yadav, Raghuraj Singh and Vibhash Yadav in the book entitled "Distributed Artificial Intelligence" e-Book ISBN 9781003038467, 1st Edition, CRC Press, Tayler & Fransis Group, December 2020, DOI: <u>https://doi.org/10.1201/9781003038467</u>
- Book Chapter "Automating Index Estimation for Efficient Option Trading using Artificial Intelligence" by Vivek Shukla, Rohit Sharma and Raghuraj Singh in the book entitled "Transforming Management with AI, Big-Data and IOT", ISBN: 978-3-030-86749-2, pp. 233-246, Springer Nature, Online January 01, 2022, DOI: <u>https://link.springer.com/book/10.1007/978-3-030-86749-2</u>

Reviewer of the Conferences: 20

- Member, Advisory Committee, International Conference on Artificial Intelligence and Smart Communication (AISC-2023), Hosted at G. L. Bajaj Institute of Technology and Management, Greater Noida, India during January 27-29, 2023.
- Member, National Advisory Board, International Conference on Contemporary Research on Mathematics & Computer Science (ICCRMCS-2022) organized by S.R.M.S. College of Engineering & Technology, Bareilly during April 29-30, 2022.
- Member, Technical Program Committee, 3rd International Conference on Machine Intelligence and Signal Processing (MISP-2021) organized by NIT, Arunachal Pradesh during September 23-25, 2021.
- Member, National Advisory Committee, 1st International Conference on Mechatronics and Artificial Intelligence (ICMAI-2021) organized by SGT University, Gurgaon during February 26-27, 2021.
- Member, Advisory Board, International Conference on System Modelling & Advancements in Research Trends (SMART-2018) organized by Teerthanker Mahaveer University, Moradabad during November 23-24, 2018.
- Member, Advisory Board, International Conference on System Modelling & Advancements in Research Trends (SMART-2017) organized by Teerthanker Mahaveer University, Moradabad during December 29-30, 2017.

- Member, Advisory Board, National Conference on Computing, Communication, Control and Informatics (NC4I-2016) organized by Kanpur Institute of Technology, Kanpur during November 5-6, 2016.
- Member, Program Committee, Sixth International Conference on Communication Systems and Network Technologies, Chandigarh, March 05-07, 2016.
- Member, Technical Program Committee, International Conference on Computer and Computational Sciences, organized by I.T.S. Engineering College, Greater NOIDA in association with IEEE UP Section, January 27-19, 2015.
- Member, Technical Program Committee, 4th International Conference on Reliability, Infocom Technologies and Optimization (www.amity.edu/aiit/icrito2015), organized by the Amity Institute of Information Technology, Amity University, Noida in association with Computer Society of India and co-sponsored by IEEE UP Section, September 2- 4, 2015.
- Member, Program Committee, 9th IEEE International Conference on Industrial and Information Systems (ICIIS-2014), organised by Atal Bihari Vajpayee Indian Institute of Information Technology and Management Gwalior, India, December 15-17, 2014.
- Member, National Advisory Committee, 3rd International Conference on Reliability, Infocom Technologies and Optimization (INCRITO-2014) organized by Amity University, Noida in association with Computer Society of India and co-sponsored by IEEE UP Section during October 8-10, 2014.
- Member, Program Committee, Ist International Conference on Information Systems and Computer Networks (ISCON-2013), organised by G.L.A. University, Mathura, March 9-10, 2013.
- Member, National Advisory Committee, 3rd IEEE International Advance Computing Conference (IACC-2013) organized by Ajay Kumar Garg Engineering College, Ghaziabad, February 22-23, 2013.
- Member, Technical Committee, Workshop on Development of Competence in Technical Education organized by G.B. Technical University, Lucknow, January 17-18, 2013.
- Member, National Advisory Board, 2ndInternational Conference on Issues and Challenges in Networking, Intelligence and Computing Technologies (ICNICT-2012) organized by Krishna Institute of Engineering and Technology & TBI-KIET, Ghaziabad, India in association with Computer Society of India (CSI) Ghaziabad Chapter, September 7-8, 2012.
- Reviewer, IEEE Sponsored Students' Conference on Engineering and Systems (SCES-2012) organised by MNNIT, Allahabad, UP, India, March 16-18, 2012.
- Member, Program Committee, 7thNational Conference on Advancement of Technologies Information Systems & Computer Networks (ISCON-12), organised by Department of Computer Engineering & Applications, GLA University, Mathura, March 3-4, 2012.

- Reviewer, International Conference on Machine Learning and Computing (ICMLC-2011), organised by the IEEE in Singapore, February 26-28, 2011.
- Reviewer, International Conference on Information Systems for Indian Languages (ICISIL-2011), organised by the Department of Computer Science, Punjabi University, Patiala, March 9-11, 2011.

21. Honours /Awards

- Award/Certificate of Recognition for Excellent Contribution in the field of Technical Education and Outstanding Services dedicated to the University by Harcourt Butler Technical University, Kanpur on the occasion of Teachers' Day i.e. September 05, 2021.
- Chief Guest, 5 Days AICTE Training and Learning (ATAL) sponsored Faculty Development Program on "Deep Learning for Computer Vision" organised by Computer Science and Engineering Department, KIET Group of Institutions, Ghaziabad during July 26-30, 2021.
- Chief Guest, 3 Days E-International Workshop on Internet of Things, Machine Learning & Its Applications, organized by Institute of Professional Excellence & Management during January 05-07, 2021.
- **Guest of Honour**, AICTE sponsored one week online Short Term Training Programme (Under AQIS) on An Introduction to Internet of Things and It's Applications for Smart, Transparent and Immutable Ecosystem organized by Computer Science and Engineering Department, NIET, Greater Noida during October 05-10, 2020.
- **Guest of Honour and Session Guest,** International Academic & Research Excellence Awards-2020 (IARE Awards) organized and conferred by the GISR Foundation on October 03, 2020.
- Chief Guest, Online Faculty Development Program on Machine Learning and its Applications using python organized by Ajay Kumar Garg Engineering College MCA, Ghaziabad in collaboration with Consilio Intelligence Research Lab, Noida during June 29 to July 03, 2020.
- Chief Guest and Jury Member, Internal Hackathon for the Smart India Hackathon-2020 organized by the CSJM University, Kanpur on March 05, 2020.
- Session Chair, IEEE sponsored International Conference on Contemporary Computing and Applications (IC3A-2020) organised by Dr. A. P. J. Abdul Kalam Technical University, Lucknow during February 5-7, 2020.
- Conferred the Lifetime Achievement Award by GISR Foundation under International Academic & Research Excellence Awards-2019 (IARE Awards) on June 08, 2019.

- Guest of Honour, 33rd Shree Gopal Krishna Singhania Memorial Inter School English Debate Competition organised by Sir Padampat Singhania Education Centre, Kanpur on October 22, 2019.
- Awarded certificate for providing Exceptional Support and Assistance in Successful conduction of the Workshop on Artificial Intelligence & Machine Learning by the Geeks Lab Technologies Pvt. Ltd on August 05, 2019.
- Guest of Honour and Keynote Speaker, IEEE (UP) sponsored International Conference on Smart and Intelligent Learning for Information Optimization (CONSILIO-2019) organised by Department of Computer Science & Engineering, MGM College of Engineering & Technology, NOIDA during June 8-9, 2019.
- Awarded Letter of Appreciation for Excellent Contribution in Promoting Digital and Online Learning to Persons with Visual disability by the ArohaTech IT Services (P) Ltd. NOIDA on July 16, 2019.
- Guest of Honour and Keynote Speaker, IEEE (UP) sponsored 7th International Conference on System Modelling and Advancement in Research Trends (SMART-2018) organised by CCSIT, TMU, Moradabad during November 23-24, 2018.
- Conferred the **Best Award for Promoting Digital Learning Platform** by CCSIT, TMU Moradabad during Silver Jubilee Celebration of IEEE (UP) Section on December 29, 2017.
- Guest of Honour and Keynote Speaker, IEEE (UP) sponsored Sixth International Conference on System Modelling and Advancement in Research Trends (SMART-2017) organised by CCSIT, TMU, Moradabad during December 28-29, 2017.
- **Guest of Honour**, U. P. Start-up Conclave Entrepreneurship and Innovation in Academic Institutions: Challenges and Opportunities organised by IIT, Kanpur (TEQIP Centre KIT), SIIC and SPFU, Lucknow during March 18-19, 2017.
- Chief Guest and Keynote Speaker and Member, Advisory Board, IEEE (UP) and CSI sponsored Fifth International Conference on System Modelling and Advancement in Research Trends (SMART-2016) organised by College of Computing Sciences & Information Technology, TMU, Moradabad during November 25-27, 2016.
- Chief Guest and Keynote Speaker, Workshop on "Skills of Success: Personal and Professional Enrichment Programme" organised by EduAhead and Shruth & Smith in collaboration with SPFU, Uttar Pradesh, Lucknow during September 22-24, 2016.
- Conferred the Fellow Award by the International Society of Agile Manufacturing (ISAM) in recognition of illustrious career in teaching, research and administration and lifelong contribution to the field of Concurrent Engineering & Education Technology on December 28, 2015 at the International Conference on Advanced and Agile Manufacturing Systems (ICAM-2015), KNIT Sultanpur.

- **Guest of Honour**, Workshop on "Ethical Hacking and Forensics" organised by Department of Computer Science & Engineering, CSJM University, Kanpur during April 12-13, 2014.
- Guest of Honour & Keynote Speaker, National Conference on "Information Security and Software Engineering", organized by Department of Computer Science & Engineering, Lucknow University, Lucknow during March 10-11, 2014.
- **Guest of Honour**, Workshop on "Artificial Neural Networks and Pattern Recognition using MATLAB", organised by Department of Information Technology, CSJM University, Kanpur during March 8-9, 2014.
- Conferred the "Dr. Kalam Award" by the Charitable Help Foundation and District Magistrate of Kannauj for excellent work in the field of social service (development of an internet browsing system for visually challenged persons) during 5th Talent Honour Function organised on October 20, 2013.
- **Guest of Honour**, Workshop on "Introduction to Software System & Computer Network", Ambedkar Institute of Technology for Handicapped, Kanpur, October 9-10, 2013.

22. Invited/Expert Lectures (44)

- "Developing Adaptive Cyber Security Systems using Machine Learning", Keynote address in IEEE sponsored 2nd International Conference on Technological Advancements in Computational Sciences organized by the Amity University, Tashkent during October 10-12, 2022.
- "National Education Policy 2020 (NEP-2020): In Higher Education Perspective", One Week AICTE/ISTE sponsored Online Induction/Orientation Program organized by the IT Department of UIET-CSJM University, Kanpur during February 18-23, 2022.
- "Artificial Intelligence Based Adaptive Cyber Security System", One Week Online Workshop on Cyber Security and Information Assurance (CSIA 2022) organized by Rajkiya Engineering College, Sonbhadra during January 27-31, 2022.
- "An Overview of National Education Policy 2020 (NEP-2020) in Higher Education Perspective", One day National Webinar on "National Education Policy 2020: A Major Milestone for New India", organized by the Department of Paint Technology, HBTU Kanpur on August 13, 2021.
- "Application of Machine Learning in Developing Adaptive Cyber Security Systems", One Week FDP on Cyber Security: Challenges and Practices", organized by Rajkiya Engineering College, Sonbhadra during July 29 to August 02, 2021.
- "Artificial Intelligence and Machine Learning", One Week STC on Recent Trends in Computer Science & Engineering organized by Bundelkhand Institute of Engineering & Technology, Jhansi during February 22-26, 2021.

- "National Education Policy-2020: The Higher Education Perspective", Webinar on NEP-2020: Institutional Restructuring and Consolidation", jointly organized by Harcourt Butler Technical University, Kanpur and SPIU (TEQIP-III), Lucknow on February 20, 2021.
- "Guidelines for Success in Engineering/Technology and Management Education", Students Orientation Program, KCC Institute of Technology and Management, Greater NOIDA on December 22, 2020.
- "Artificial Intelligence: Knowledge Management and Intelligent Agents", AICTE sponsored ATAL-FDP on Machine Learning and Intelligent Systems organized by Rajkiya Engineering College, Kannauj during October 5-9, 2020.
- "Learning Environment in Higher Education Institutions for Education 4.0", International Workshop on Education 4.0: Transformation of Learning Environment, organized by Rajkiya Engineering College, Banda during May 29-30, 2020.
- "Transforming Teaching-Learning Environment in Higher Education Institutions for Education 4.0", FDP on Transforming Education with Industry 4.0 organized by Information Technology Department, Rajkiya Engineering College, Banda in association with Consilio Intelligent Research Lab during June 15-20, 2020.
- "Role of Digital and Online Teaching-Learning Process during Lockdown due to COVID-19 Pandemic", National Webinar on Significant Role of E-education through Social Distancing during Lockdown of COVID-19 Pandemic organized by IET, Dr. RML Avadh University, Ayodhya, AIT Bengaluru and SPIU Lucknow during April 8-9, 2020.
- "Recent Trends in Artificial Intelligence and Machine Learning", Expert Lecture Series, Pranveer Singh Institute of Technology, Kanpur on February 29, 2020.
- "Modeling for Optimization using Genetic Algorithm", One Week Faculty Development Programme on "Expanding Horizons of Bioprocesses" organized by Bio-Chemical Engineering Department, HBTU Kanpur during February 10-15, 2020.
- "An Overview of Artificial Intelligence and Machine Learning", One Week Faculty Development Programme on Artificial Intelligence for Engineering Research organized jointly by Departments of Computer Science & Engineering, HBTU Kanpur and TCE Madurai during Nov. 11-15, 2019.
- "An Overview of Machine Intelligence and Machine Learning", Two Weeks Short Term Course on Control and Machine Intelligence organized by Electrical Engineering Department, HBTU Kanpur during September 16-28, 2019.
- "Concepts and Techniques of Machine Learning and Internet of Things", One week Workshop on Machine Learning and IOT organized by Rajkiya Engineering College Banda during September9-13, 2019.
- "Introduction to Blockchain Technology", Faculty Development Programme, organized by National Institute of Technology, Hamirpur (HP) during July 8-17, 2019.

- "Artificial Intelligence: Emerging Trends and Applications", International Conference on "Emerging Trends in Technology and Applications (ICETTA-2019) organized by Rajkiya Engineering College, Kannauj during February 1-2, 2019.
- "Artificial Intelligence: Overview, Issues and Future Trends", One week Faculty Development Programme on Applications of Artificial Intelligence organized by Rajkiya Engineering College Banda during October 30 to November 03, 2018.
- "Role of Analysis, Modeling & Simulation in Research", One week Faculty development Programme on Mathematical Modeling & Research Methodology, organized by the Department of Mathematics, HBTU Kanpur during October 08-12, 2018.
- "IT Project Management and the Impact of Information Technology on the Human Resource Professionals", Two day National Conference on Human Resource Management in World of Information Technology organized by STEP-HBTI, Kanpur during December 2-3, 2017.
- "Data Science: An Introduction", IETE Foundation Day celebration by the IETE Students Forum (ISF) Krishna Institute of Technology, Kanpur on November 02, 2017.
- "Software Development: Areas of Application, Approach and Effectiveness", Indus Institute of Technology & Management, Bilhaur, Kanpur, April 17, 2017.
- "Modelling and Simulation Techniques for Engineering Research", Two weeks AICTE sponsored FDP on Simulation and Mathematical Tools for Engineering Research organised by KNIT, Sultanpur during July 04-15, 2016.
- "Optimization using Genetic Algorithm and PERT/CPM", One week FDP on IT Tools and Optimization organized by Kanpur Institute of Technology, Kanpur during June 6-11, 2016.
- "Research Methodology: An Overview", AICTE sponsored two weeks FDP on Research Methodology using Data Analytical Tools organized by KNIT, Sultanpur during January 11-22, 2016.
- "Non-functional Requirements (NFR): An Analysis on Quality Perspective, 3rdLucknow Science Congress (LUSCON-2015) & National Conference on Science for Society: An Interdisciplinary Approach organized by Babasaheb Bhimrao Ambedkar University, Lucknow during October 31 to November. 02, 2015.
- "Engineering Education: An Analysis", State level Faculty Interaction Seminar organized by H.B.T.I., Kanpur during June8-9, 2015.
- "Cyber Laws in India: A Critical Analysis", National Level Seminar on "Internet Security and Cyber Laws" organized by the Department of Computer Science & Engineering, HBTI, Kanpur during April 5-6, 2014.
- "Accreditation and Assessment of Engineering Institutions", and "Autonomy in Higher Engineering Institutions", FDP on "Engineering Education: Opportunities, Challenges & Future Directions", organized by Department of Mechanical Engineering, HBTI Kanpur during March 7-12, 2014.

- "Analysis & Modeling of Software Systems" and "Optimization of Software Codes", FDP on "Digital Signal Processing using MATLAB, organized by Department of Electronics Engineering, HBTI Kanpur during January 6-10, 2014.
- "Modeling and Simulation of Software Systems" and "Modeling of Optimal Software Reliability Allocation Problem using Genetic Algorithm", FDP on "Simulation, Modeling and Analysis of Engineering Systems" organized by the Department of Computer Science & Engineering, HBTI, Kanpur during October 25-30, 2013.
- "Appropriate Approach for Quality Software Development", Two day Workshop on "Introduction to Software System & Computer Network", Ambedkar Institute of Technology for Handicapped, Kanpur during October 9-10, 2013.
- "Advancements in Teaching Methodologies" and "Virtual Classroom", FDP "Essentials of Teaching Learning Process" organized by Humanities Department, HBTI, Kanpur during March 18-23, 2013.
- Live session on "Software Engineering" for IGNOU, Gyan Vani Channel, All India Radio, Kanpur.
- "Software Engineering Principles and Practice", Ambedkar Institute of Technology for Handicapped, Kanpur.
- Live session on "Artificial Intelligence & Expert Systems" for IGNOU, GyanVani Channel, All India Radio, Lucknow.
- "Paradigm Change in Computer Programming", Institution of Engineers (India), Kanpur Local Chapter.
- "Object Oriented Software Design Approach", IRDT, Kanpur.
- "Quality Software Development Approach", Dr. Virendra Swarup Institute of Computer Studies, Kanpur.
- "Research Issues in Software Engineering", IETE Kanpur Chapter.
- "Internet and its Applications", D.B.S. College, Kanpur.
- "Paradigm Shift in Software Development", IRDT, Kanpur.

23. Courses / Workshops/ Conferences Organised (30)

- Member, Organizing Committee of One Week National Level FDP cum STTP on "Recent Trends and Advancements in the Era of Machine Learning", organized by the Department of Computer Science & Engineering, HBTU Kanpur during July 19-24, 2021.
- Webinar on "National Education Policy-2020: Institutional Restructuring and Consolidation", jointly organized by Harcourt Butler Technical University, Kanpur and SPIU (TEQIP-III) Uttar Pradesh, Lucknow on February 20, 2021.
- Online Training on "Machine Learning with MATLAB", jointly organised by DesignTech and Computer Science & Engineering Department, HBTU Kanpur on October 22, 2020.

- Online Training Program on "Rational Software Architect Design", for faculty and students, HBTU Kanpur in association with by IBM on June 06, 2020.
- Webinar on "Integrated Development Environment for IOT Applications", HBTU Kanpur in association with Shyam Techno Solutions, Kanpur on May 26, 2020
- Webinar on "Computer Communication Networks Lab Experiments and R&D using NetSim", HBTU Kanpur in association with NetSimTM and Tetcos Ltd. on May 20, 2020.
- Webinar on "Microsoft Digital Transformation", HBTU Kanpur in association with Microsoft and Cloud Education on May 12, 2020.
- Webinar on "MATLAB for AI, Machine Learning and Deep Learning", HBTU Kanpur in collaboration with DesignTech Systems Ltd. on April 30, 2020.
- One Week workshop on "AI for Engineering and Research", jointly organized by Department of Computer Science & Engineering, Thiagarajar College of Engineering, Madurai and Computer Science & Engineering Department, HBTU Kanpur under TEQIP-III during November 11-15, 2019.
- One day Workshop on "Technological Contribution in Education and Innovation for Success" under twinning programme of TEQIP-III, HBTU Kanpur on September 01, 2019.
- Two Week Summer Training Program for Ist year B. Tech. students including "Pythan Programming, Data Analysis, Machine Learning, Robotics, Aero-Modelling, RP & IOT" during, HBTU Kanpur during July 08-20, 2019.
- Two day National Conference on "Intelligent Computing, Communication and Data Science (NCICCD-2018), HBTU Kanpur during November 29-30, 2018.
- One day workshop on "Enhancement of Professional Skills for Placement", HBTU Kanpur on September 05, 2018.
- One day Workshop on Ideation, HBTU Kanpur on September 01, 2018.
- One day Workshop on Entrepreneurship Development, HBTU Kanpur on September 05, 2018.
- Two weeks Summer Training Program on "Introduction to Core Java, Web and Android Studio", HBTU Kanpur during July 09-21, 2018.
- National Level Conference on "Internet Security and Cyber Laws" and INCORD-2014: The Annual Technical Fest of Department of Computer Science & Engineering, HBTI, Kanpur, April 5-6, 2014.
- One week Faculty Development Programme on "Modelling, Simulation and Analysis of Engineering Systems", Department of Computer Science & Engineering, HBTI, Kanpur, October 25-30, 2013.
- National Level Seminar on "Issues and Challenges of Computer Science & Engineering as a discipline", Department of Computer Science & Engineering, HBTI, Kanpur, March 9, 2013.

- Eighth International Alumni Meet-2012 under the banners of Alumni Association, HBTI, Kanpur, November 27, 2012.
- National Level Seminar INCORD-2012, "Stop Online Piracy Act", Computer Science & Engineering Department, HBTI, Kanpur, March 3-4, 2012.
- Seventh International Alumni Meet-2011, Alumni Association, HBTI, Kanpur, November 27, 2011.
- National Level Seminar INCORD-2010, "Business Intelligence", Computer Science & Engineering Department, HBTI, Kanpur, March 21-22, 2010.
- National Level Seminar INCORD-2009, "Next Generation Internet Technologies", Computer Science & Engineering Department, HBTI, Kanpur, February 21-22, 2009.
- Five day Faculty Development Programme, "Network Administration and Information Security", under Technical Education Quality Improvement Programme (TEQIP) of World Bank, HBTI, Kanpur, November 05-09, 2008.
- National Level Seminar INCORD-2008, "Multi-Core Architecture", Computer Science & Engineering Department, HBTI, Kanpur, February 23-24, 2008.
- National Level Seminar INCORD-2007, "High Performance Computing", Computer Science & Engineering Department, HBTI, Kanpur, February 17-18, 2007.
- National Level Seminar INCORD-2006, "Service Oriented Architecture", Computer Science & Engineering Department, HBTI, Kanpur, February 18-19, 2006.
- Technical Festival INCORD-2005, "Web Enabled Applications", Computer Science & Engineering Department, HBTI, Kanpur, February 15-17, 2005.
- National level Seminar WIZCOMP, "Recent Trends in Computing and Applications", Computer Science & Engineering Department, HBTI, Kanpur, March 20-21, 2004.

24. Courses / Workshops/ Conferences Attended (35)

- Webinar on "Artificial Intelligence (AI) and Media", organized by BVICAM, New Delhi on 28 May, 2022.
- Workshop on "NAAC Manthan" organized by the Raj Bhavan Uttar Pradesh at Dr. A.P.J. Abdul Kalam Technical University, Lucknow during April 4-5, 2022.
- Webinar on "How should Indian Higher Education & Examinations look in the Future with Learning Spiral and AWS" organised by AMAZON-AWS on April 21, 2020.
- National Webinar on "Unlocking the Lockdown through E-examination", organised by IET, Dr. RML University Ayodhya and SPIU Lucknow on April 20, 2020.
- National Webinar on Virtual Lab organised by IET, Dr. RML University, Ayodhya, SPIU Lucknow and AIT Bengaluru on April 16, 2020.

- National Seminar on "Significant Role of E-education through Social Distancing", organised by IET, Dr. RML University, Ayodhya, SPIU Lucknow and AIT Bengaluru on April 8-9, 2020.
- Train the Trainers Workshop on "AICTE Examination Reforms Policy" organised by KLE Society, Hubli during February 17-19, 2020.
- Executive Program by the Art of Living organised by SPIU, Uttar Pradesh at International Centre of Art of Living, Bengaluru during April 19-21, 2019.
- Twinning Workshop: Establish Mechanism for Enabling Peer to Peer Learning and Knowledge Sharing organised by NPIU and SPIU Uttar Pradesh during May 30-31, 2019.
- Workshop on "Procurement Process and Assessment" organised by SPIU-UP under TEQIP-III on December 04, 2018.
- Workshop on "Outcome Based Accreditation for Undergraduate Engineering Programs" jointly organised by HBTU, Kanpur and UPTTI Kanpur during March 22-23, 2018.
- Workshop on "Start-up Incubation and Entrepreneurship", organised by the SPIU Lucknow under TEQIP-III at Dr. A.P.J. Abdul Kalam Technical University, Lucknow during December 26-27, 2017.
- One day Workshop o Review and Update of the Curriculum of PG Courses & Mapping with Mission and Vision, organised my Department of Computer Science & Engineering, IT, Allahabad on September 29, 2014.
- Workshop on "Industry-Academia Interaction for Strengthening Technical Education" under TEQIP-II, World Bank organised by the PHD Chamber of Commerce and Industry and HBTI, Kanpur on August 30, 2013.
- INTEL sponsored short term course, "Program Optimization for Multi-Core Architectures", organized by IIT, Kanpur, June 30 to July 05, 2008.
- Short term training programme, "DB2, SQL, Eclipse and Websphere", organized by IBM India Pvt. Ltd., J.S.S. Academy of Computer Education, NOIDA, March 20-24, 2007.
- IBM Certified Database Associate -- DB2 Universal Database V8.1 Family since March 23, 2007.
- International Workshop on Biometrics, organized by IIT, Kanpur, December 1-2, 2006.
- Four day Workshop on RATIONAL SUITE organized by HBTI, Kanpur under the World Bank assisted TEQIP, Government of India, December 21-24, 2005.
- Two day Workshop on DB-II organized by IBM, Computer Science & Engineering Department, HBTI, Kanpur, November 25-26, 2005.
- International Workshop on "Recent Trends in Biometric Systems", organized by IIT, Kanpur, April 15-16, 2005.
- International Conference on Interdisciplinary Mathematics: SCRA2004, organized by Sherwood College of Management, Lucknow, December 27-29, 2004.

- Short term faculty training programme, "LINUX Administration" organized by IIT, Kanpur, December, 2004.
- Short term faculty training programme, "Dot Net Technology using C#", organized by Microsoft Corporation (India) Pvt. Limited, BBDNITM, Lucknow, July 5-9, 2004.
- National level Seminar, "Emerging Wireless Standards: 802.11, Bluetooth and 3G", organized by Department of Electronics Engineering and Computer Science & Engineering, HBTI, Kanpur, March 23, 2002.
- Training programme, "Data Warehousing and Data Mining", conducted by IIT Bombay under Instruction Enhancement Programme of Project IMPACT-SSS of DOE, Government of India, July 01- 05, 2000.
- Two day National Seminar, "E-commerce and Web Enabled Applications" organized by Department of Computer Science & Engineering, HBTI, Kanpur, March 27-28, 2000.
- Two day training programme, "ISO 9000 Implementation", HBTI, Kanpur, November 22-23, 1999.
- QIP Summer Course, "Probability Random Processes and Elements of Information Theory", organized by IIT, Kanpur, June 14-26, 1999.
- Three day in-house training programme, "Total Quality Management in Technical Education", organized by the ISTE Chapter C. R. State college of Engineering, Murthal (Sonepat), February 20- 23, 1998.
- National Seminar, "Efficient use of Electric Motors, Generators and Drives for Industries and Utilities for the purpose of achieving saving in Energy", organized by the Institution of Engineers, C. R. State College of Engineering, Murthal (Sonepat), February 16, 1997.
- National Symposium, "Computer Applications in Management & Modern Technological Developments", organized by Institution of Engineers, REC Kurukshetra, October 13, 1996.
- AICTE sponsored Induction Training Programme, Academic Staff College, Kurukshetra University, Kurukshetra, July15, 1996 to August 03, 1996.
- ISTE Summer School, "Artificial Intelligence and Expert Systems", Regional Engineering College, Hamirpur, July 10-23, 1995.
- ISTE Winter School, "Artificial Intelligence and Expert Systems", Bengal Engineering College, Howra, January 10-22, 1994.

(Prof. Raghuraj Singh)