Dr. Heman Pathak

Ph.D., M.Sc.(Comp. Sc.)

Professor

Department of Computer Science
Faculty of Science, Kanya Gurukul, Dehradun
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Personal/Professional Details

Date of Birth	:	*10th August, 1969*
Nationality/ Religion	:	*Indian/ Hindu*
Sex/ Marital Status	:	*Female/ Married*
Departmental Address	:	***Dr. Heman Pathak*** *(Professor)* *Department of Computer Science* *Kanya Gurukul Campus* *47, Sewak Ashram Road* *Dehradun – 248001 (Uttarakhand)*
Residential Address	:	*25, Alkapuri, Ballupur Road* *Dehradun – 248001 (Uttarakhand)*

Academic & Research Credentials

Ph.D. Topic	:	*Fault Tolerant Execution of Mobile Agent Systems*
Ph.D. Awarded on	:	*8th March, 2010*
Teaching Experience	:	26 Years
Research Experience	:	20 Years
No. of Research Paper Published	:	63 (In Journals-38/ Proceedings-18/ Chapter in Book-7)
International Conference Attended	:	*14 (Paper Presented)*
National Conference Attended	:	*9 (Paper Presented)*
No. of Ph.D. Enrolled	:	1(Enrolled)+ 5 (Awarded)
Area of Research	:	Mobile Agent/Adhoc Technology, Big Data Analytics, Machine/Deep Learning

Qualification

Examination	University	Year	Subject	Division/Rank
Ph.D	GKV, Haridwar	2010	Computer Science	-
M.Sc.	BHU, Varanasi	1992	Computer Science	First/3
DCSA	BHU, Varanasi	1990	Comp. Sc. & Application	First/2
B.Sc.(Hons)	BHU, Varanasi	1989	Physics, Mathematics, Statistics (Hons)	First/1 (3rd Year)

Orientation/Refresher Course/ Faculty Development Workshops Attended (8)

S.N.	Name of the Course/ Summer School	Place	Duration
1.	Orientation Course	BHU VARANASI (UP)	31st Jan, 2001 – 27th Feb, 2001
2.	Refresher Course (Computer Science)	Burdwan University BURDWAN (WB)	24th Dec, 2004- 13th Jan, 2005
3.	Refresher Course (Environmental Science)	Pondicherry University PONDICHERRY	4th Dec, 2007 – 24th Dec, 2007
4.	Refresher Course (Information and Communication Technology – Computer Science)	Gujrat University AHEMADABAD (GU)	8th June, 2009 – 28th June, 2009
5.	ISTE Workshop (Effective Teaching/ Learning of Computer Programming)	IIT, Bombay	14th Dec, 2009 – 24th Dec, 2009
6.	National workshop cum training program on Computing Techniques and Applications (NWCTP-CTA)	BHU, Varanasi	1st July, 2012 – 7th July, 2012
7.	Innovation Ambassador Training (Foundation Level, Total 15 Sessions of 30 contact hours)	MoE's Innovation Cell & AICTE (Online)	30th June - 30th July 2021
8.	"SWOTHE-2022" 14-Day Faculty Development Program	Law College, Faculty of Uttaranchal University, Dehradun	27th July to 13th Aug, 2022
9.	NEP Orientation & Sensitization Programme (Online)	UGC – MM-TTP, Centre for Professional Development in Higher Education (CPDHE), New Delhi	5-14 December, 2023
10.	Innovation Ambassador Training "Advanced Level"(Online)	Ministry of Education's Innovation Cell, Government of India& AICTE	21 Aug., 2023 to 20 Sep., 2023

List of Publications

In Journals (38)

1. Heman Pathak, Kumkum Garg, Nipur, "*Comparative Performance of Hierarchical Fault Tolerance Protocol for Mobile Agent Systems*" in International Journal of Information Technology and Knowledge Management (IJITKM), ISSN: 0973-4414, Volume 3, Number-1pp: 99-104 January - June, 2010.

2. Heman Pathak, Kumkum Garg, Nipur, "*Three Layered Hierarchical Fault Tolerance Protocol for Mobile Agent System*" in International Journal of Scientific and Engineering Research (IJSER), ISSN - 2229-5518Print ISSN - 2229-5518 01(Online), Volume 2 Issue 1,pp: 19-25 January 2011 .

3. Heman Pathak, Kumkum Garg, Nipur, "*Performance Analysis of Hierarchical Fault Tolerance Protocol for Mobile Agent Systems*" in Journal of Computer Science (JCS) , ISSN 0973-2926, Volume 5, Issue 2, pp: 118-124Jan-Feb 2011.

4. Heman Pathak, Kumkum Garg, Nipur, "*Design, Validation, Simulation and Parametric Evaluation of a Fault Tolerant Network Trading System Using Mobile Agent*" in Journal of Information and Operations Management (JIOM), ISSN:0976-7754, E-ISSN: 0976-7762, Volume 3, Issue 1, pp: 124-128, 2012.

5. Heman Pathak, "*Comparative Performance of Hierarchical Location Management Mechanisms for Mobile Agents*" in Journal of Information Systems and Communication (JISC), ISSN: 0976-8742, E-ISSN: 0976-8750, Volume 3, Issue 1, pp: 278-281, 2012.

6. Heman Pathak, "*Colored Petri Net based Modeling of Hybrid Location Management Mechanism for Mobile Agents*" in Journal of Information Systems and Communication (JISC), ISSN: 0976-8742, E-ISSN: 0976-8750, Volume 3, Issue 1, pp: 291-294, 2012.

7. Swati Aggrawal, Heman Pathak, "*Analysis of Location Management Mechanisms for Mobile Multi Agents*" in International Journal of Information and Computation Technology (IJICT), ISSN: 0974-2239, Volume 3, Number 9pp: 917-926, 2013.

8. Heman Pathak, "*Trust Model for Hybrid Security Architecture based on Reputation for Secure Execution of Mobile Agents*" in International Journal of Information and Computation Technology(IJICT), ISSN: 0974-2239, Volume 4, Number 1, pp: 67-72, 14.

9. Swati Aggarwal, Heman Pathak, Avdhesh Gupta, "*A Secured Layered Architecture For Mobile Agent*" in International Journal of Computer Applications (IJCA), ISSN: 0975–8887ISBN: 973-93-80880-93-2, IJCA-Proceedings-ICACEA/Number-3 pp: 23-28.

10. Swati Aggarwal, Heman Pathak, "*Mechanisms to Locate Mobile Agents in Multi Agents Environment*" in International Journal of Computer Applications (IJCA) ISSN-(0975 –8887) Volume 106, No.5, November 2014 Pp: 39-43.

11. Heman Pathak, "*Search and Update Based Solutions to Locate Mobile Agents in the Global Network*" in International Journal of Mobile And AdHoc Network (IJMAN), ISSN(Online): 2231:6825 ISSN(Print): 2249–202X, Vol. 4, Issue 1, Pp: 75-79, Jan-Apr 14.

12. Swati Aggarwal, Heman Pathak, "*Improved Hierarchical Location Management Schemes to Locate Mobile Agents in Multi Agents Environment*", in IPASJ International Journal of Computer Science (IIJCS) Volume 2, Issue 10, Oct.-2014 pp 16-22 ISSN :2321- 5992

13. Heman Pathak,"Colored Petri Net (CPN) based Model for Hybrid Security Architecture based on Reputation for Secure Execution of Mobile Agents", in International Journal of Application or Innovation in Engineering & Management Vol. 5, Issue 1, January 2016 pp: 137-143 (ISSN:2319-4847)

14. Heman Pathak, "*Malicious Host and Problem of Blocking for Mobile Agent: Proposed Solution*" in International Journal of Advanced Research in Computer and Communication Engineering (IJARCCE), ISSN: 2319 – 5940ISSN: 2278- 1021 (Online Version), Vol. 3, Issue 2, February 2014.

15. Heman Pathak, "*A Novel Approach to Compute Reputation Value for Trust based Hybrid Security Architecture for Mobile Agents*", in International Journal of Advanced Research in Computer and Communication Engineering (IJARCCE) Vol. 5, Issue 2, February 2016 pp:630-633, ISSN (Online) : 2278-1021 ISSN (Print) : 2319-5940

16. Heman Pathak, Swati Aggarwal, "*Performance Analysis of Hierarchical Location Management Scheme to Locate Mobile Agents*", in International Journal of Advanced Research in Computer and Communication Engineering (IJARCCE) Vol. 5, Issue 3, March 2016 pp 757-762, ISSN (Online) : 2278-1021 ISSN (Print) : 2319-5940

17. Heman Pathak, Swati Aggarwal, "*Cryptography Based Hybrid Security Architecture for Mobile Multi Agents*" in International Journal on Recent and Innovation Trends in Computing and Communication (IJRITCC) Volume 4, Issue 11, November 2016 pp 154-159, ISSN: 2321-8169.

18. Heman Pathak, Swati Aggarwal "*Hierarchical Location Management Schemes for Mobile Multi agents Communication" in VIVECHAN: International Journal of Research IMS Ghaziabad Volume7, Issue-2, 2016 pp 84-91, ISSN: 0976-8211.*

19. Swati Aggrawal, Heman Pathak, *"A New Hierarchical Fault Management System (HFMS) of Mobile-Multi Agents"* in International Journal on Computer Science and Engineering (IJCSE), Volume 9 No.03 Mar 2017 pp 83-93, ISSN: 0975-3397.

20. Surbhi Patel, Heman Pathak *"A Review of On-Demand Quality of Service (QoS) Routing Protocols in Mobile Ad hoc Networks"*, in International Journal of Scientific Research Engineering & Technology (IJSRET), Volume 6, Issue 9, September 2017 pp 982-989, ISSN: 2278-0882.

21. Swati Singhal, Heman Pathak, "Cryptography Based Security Mechanism for Mobile-Multi-Agent Environment" in International Journal of Computer Science & Informational Technology, Volume 7 – Number 11, November, 2017 pp 133–138, ISSN: 2231-2471

22. Anuj Kumar, Heman Pathak, "A Comparative Study of Grid Load Balancing" in International Journal of Computer Applications (IJCA), Volume 179 - Number 18, February 2018 pp 25-33, ISSN:0975 – 8887

23. Anuj Kumar, Heman Pathak, "Dynamic Load Balancing for Computational Grids using Binary Heaps (DLBCGBH – H / D)" in International Journal of Computer Sciences and Engineering (JCSE), Vol.-6, Issue-5, May 2018, pp 270-277, EISSN: E-ISSN: 2347-2693.

24. Anuj Kumar, Heman Pathak*, "Fuzzy Min – Max Scheduling (FMiMaS) for Computational Grids"* in International Journal of Computer Sciences and Engineering (IJCSE)Volume 6, number 6, June, 2018, pp 567–575, ISSN: 2347-2693

25. Swati Singhal, Heman Pathak,"Comparative Performance Analyses Of Hierarchical Location Management Scheme To Provide Communication Among Mobile Multi Agents", in International Journal of Computer Science & Information Technology(VSRD), Volume: 8 Issue: III March 2018, pp 23-30, ISSN: 2231-2471.

26. Swati Singhal, Heman Pathak, "CPN Modeling and Performance Analysis Of CBHSA", in International Journal on Future Revolution in Computer Science & Communication Engineering, Volume: 4 Issue: 4 April 2018, pp 158 –166, ISSN: 2454-4248.

27. Anuj Kumar, Heman Pathak, "*Survey on Scheduling Algorithms for Grid Computing*" in International Journal of Research in Electronics and Computer Engineering, Volume:6-Number:3 , September-2018, pp 69–80, ISSN: 2348-2281. (UGC CARE LIST OLD)

28. Swati Singhal, Heman Pathak "*Performance Analysis of Hierarchical Location Management System for Mobile-Multi-Agent System"* in International Journal of Wireless and Mobile Computing (IJWMC), Volume:16-Number:4 May, 2019, pp 377–383, ISSN: 1741-1092.

29. Surabhi Patel, Heman Pathak "A regression-based technique for link failure time prediction in MANET" in International Journal of High Performance Computing and Networking (IJHPCN), Vol. 16, No. 2/3, 2020, pp 95-101,Online ISSN: 1740-0570.

30. Surabhi Patel, Heman Pathak "A mathematical framework for link failure time estimation in MANETs" in Engineering Science and Technology, an International Journal, 2021, ISSN: 2215-0986. IF:4.36, Indexed in-SCI

    DOI: https://doi.org/10.1016/j.jestch.2021.04.003

31. Surabhi Patel, Heman Pathak "A Cross-Layer Design and Fuzzy Logic based Stability Oriented Routing Protocol" in International Journal of Computer Network and Information Security, Vol. 14, No. 2, pp 54-66 Feb., 2022 P-ISSN: 2074-9090, E-ISSN: 2074-9104 Indexed in SCOPUS

32. Kotiyal, B., & Pathak, H. (2022). Diabetic Retinopathy Binary Image Classification Using Pyspark.International Journal of Mathematical, Engineering and Management Sciences, 7(5), 624-642. (SCOPUS, ESCI)

    DOI: https://doi.org/10.33889/ijmems.2022.7.5.041

33. Bina Kotiyal, Heman Pathak, Nipur Singh (2023). Debunking multi-lingual social media posts using deep learning. International Journal of Information Technology , Vol. 15, Issue 5, 4 June, 2023 pp 2569–2581 ISSN:2511-2104 E-ISSN:2511-2112 (SCOPUS)

    DOI: https://link.springer.com/content/pdf/10.1007/s41870-023-01288-6.pdf

34. Yashi Chaudhary, Heman Pathak (2023). MCIP: Mining Crop Image Data On Pyspark Dataframe Using Feature Selection and Cluster Based Techniques. International Journal of Experimental Research and Review, 34(Special Vo), 106–119.(SCOPUS)

    DOI: https://doi.org/10.52756/ijerr.2023.v34spl.011

35. Yashi Chaudhary, Heman Pathak (2024). CYPBL: Crop Yield Prediction using Bi-Directional LSTM under PySpark interface. Multimed Tools Appl 83, 75781–75800 (2024).

    DOI: https://doi.org/10.1007/s11042-024-18638-6

36. Singh, A. P., Singh, M., Bhatia, K., & Pathak, H. (2024). Encrypted malware detection methodology without decryption using deep learning-based approaches. Turkish Journal of Engineering, 8 (3), 498-509

    DOI: https://doi.org/10.31127/tuje.1416933

37. Aswal, Kiran; Pathak, Heman (2024). Machine learning-based malware detection system for securing android-based internet of vehicles. Mathematics in Engineering, Science & Aerospace (MESA), 2024, Vol 15, Issue 4, p1347 (SCOPUS)

    https://nonlinearstudies.com/index.php/mesa/issue/view/215

38. Aswal, Kiran; Pathak, Heman (2024). Advancing Vehicle Security: Deep Learning based Solution for Defending CAN Networks in the Internet of Vehicles. EAI Endorsed Transactions on Internet of Things, vol. 10, Oct. 2024.

    DOI: https://doi.org/10.4108/eetiot.6523

Chapter in Book (7)

1. Heman Pathak, "Location Management Mechanisms for Mobile Agents", chapter in Book Evolving Ideas: Computing, Communication and Networking By Jeetendra Pande, Nihar Ranjan Pande, Deep Chandra Joshi, Global Vision Publishing House New-Delhi (India), pp: 311-316, ISBN: 978-81-8220-410-2, March 5, 2011.

2. Kumar, A., Pathak, H. (2019). "Fault Tolerant Resource Management Scheme for Computational Grids", in Hemanth, J., Fernando, X., Lafata, P., Baig, Z. (eds) International Conference on Intelligent Data Communication Technologies and Internet of Things (ICICI) 2018. ICICI 2018. Lecture Notes on Data Engineering and Communications Technologies, vol 26. Springer, Cham. 4520, (SCOPUS).

3. Kotiyal, B., Pathak, H. (2022). "Big Data Preprocessing Phase in Engendering Quality Data" in Tomar, A., Malik, H., Kumar, P., Iqbal, A. (eds) Machine Learning, Advances in Computing, Renewable Energy and Communication. Lecture Notes in Electrical Engineering, vol 768. Springer, Singapore, E-ISSN: 1876-1119, SCOPUS.

4. Chaudhary, Y., Pathak, H. (2022). "Security of Big Data: Threats and Different Approaches towards Big Data Security" in Agrawal, D.P., Nedjah, N., Gupta, B.B., Martinez Perez, G. (eds) Cyber Security, Privacy and Networking. Lecture Notes in Networks and Systems, vol 370. Springer, Singapore. E-ISSN: 2367-3389, (SCOPUS).

5. Kotiyal, B., Pathak, H. (2022). "Toward Big Data Various Challenges and Trending Applications" in Agrawal, D.P., Nedjah, N., Gupta, B.B., Martinez Perez, G. (eds) Cyber Security, Privacy and Networking. Lecture Notes in Networks and Systems, vol 370. Springer, Singapore. E-ISSN: 2367-3389, (SCOPUS).

6. Dinesh C. Dobhal, Kiran Aswal, Heman Pathak and Umesh K. Tiwari. "The ransomware: An emerging security challenge to the cyberspace" in Preeti Malik, Lata Nautiyal and Mangey Ram (Machine Learning for Cyber Security), Berlin, Boston: De Gruyter, 2023 Walter de Gruyter GmbH, Berlin/Boston pp. 41-70 EISBN: 9783110766745 ISBN: 9783110766738

   DOI: https://doi.org/10.1515/9783110766745-003

7. Chaudhary, Y., Pathak, H. (2025). Role of Machine Learning for Big Data Applications. In: Nedjah, N., Martinez Perez, G., Gupta, B.B. (eds) International Conference on Smart Systems and Advanced Computing (SysCom 2022). SysCom 2022. Advances in Intelligent Systems and Computing, vol 1451. Springer, Cham.

   DOI: https://doi.org/10.1007/978-3-031-40905-9_23

In International Conference Proceedings (10)

1. Heman Pathak, Nipur *"Virtual group Based Hierarchical Fault tolerance Protocol for Mobile Agent Systems"*, in proceedings of International Conference on information & Communication technology (IICT 2007), pp 816-820, DIT, Dehradun, India.

2. Heman Pathak, K. Garg, Nipur, *"CPN model for Hierarchical Fault Tolerance Protocol for Mobile Agent Systems"*, in proceedings International Conference of Networks (ICON 2008), New Delhi, India, December 2008.

3. Heman Pathak, K. Garg, Nipur, "*A Fault Tolerant Comparison Internet Shopping System: Best Deal using Mobile Agents*", in proceedings International Conference on Information Management and Engineering (ICIME 2009), Kulalampur, Malaysia, April 2009.

4. Heman Pathak, "*Hybrid Security Architecture (HSA) for Secure Execution of Mobile Agents*", in Proceeding of the International Conference on Communication, Computing & Security (ICCCS2011), ACM Press, ISBN: 978-1-4503-0464-1 February 12-14, 2011, Rourkela, Odisha, India.

5. Heman Pathak, "*A Novel Flexible and Reliable Hybrid approach to provide Security to Mobile Agents and the Executing Host*" in the Proceeding of International Conference on Electronics, Information and Communication Systems Engineering (ICEICE-2010) held at Faculty of Engineering, JNV University, Jodhpur – Rajasthan from 28th to 30th March, 2011.

6. Swati Aggarwal, Heman Pathak, Avdhesh Gupta, *"A Secure Algorithm for the Security of Mobile Multi Agent System"*, In the proceedings of IEEE Workshop on Computational Intelligence: Theories, Applications and Future Directions , IIT Kanpur, (UP), pp: 153-157, July 14, 2013.

7. Swati Aggarwal, Heman Pathak, *"Modelling of hierarchical location management schemes to locate mobile multi agents using colored Petri Net"*, in the Proceeding of International Conference on Advances in Computer Engineering and Applications, ICACEA Ghaziabad, 2015, pp. 821-825, Publisher: IEEE, ISBN:978-1-4673-6911-4.

8. Aswal, Kiran, Dobhal, D.C., Heman Pathak, *"Comparative analysis of machine learning algorithms for identification of BOT attack on the Internet of Vehicles (IoV)",* in Proceedings of the 5th International Conference on Inventive Computation Technologies, ICICT 2020, pp. 312–317. doi: 10.1109/ICICT48043.2020.9112422.

9. Surabhi Patel, Heman Pathak"Characterising the performance of AODV for various mobility scenarios", in Proceedings of 2nd International Conference on Range Technology (ICORT), 2021 pp-1-5, ISBN:978-1-6654-4956-4, IEEE

10. Kiran Aswal, Heman Pathak, Nipur Singh, Neena Gupta "Strength and Limitations of Publicly Available Anti- Malware Tools Against Obfuscated Malware" in Proceedings of 5th International Conference on Inventive Research in Computing Applications (ICIRCA-2023) organized by RVS College of Engineering and Technology, Coimbatore, India from 3-5 August 2023.

In National Conference Proceedings (8)

1. Heman Pathak, K. Garg, Nipur, "Fault Tolerance approaches for Mobile Agent Systems: A Comparative Study", in National Conference on Trends of Computational Techniques in Engineering Organized by SLIET, Longowal (Punjab), Pp: 119-123, October 15-16, 2004.

2. Heman Pathak, K. Garg, Nipur, "Fault Tolerance Problem & Challenges for Mobile Agent Systems and Proposed Solution", in National Conference on Communication & Computational Techniques: Current & Future Trends (NCCT-06) Organized by DIT, Dehradun (UK) Pp: 381-386 February 10-11, 2006.

3. Heman Pathak, K. Garg, Nipur, "*Performance Analysis of Fault Tolerant Internet Shopping System: BestDeal using Mobile Agents*", in proceedings of National Conference on Information and Software Engineering (NCISE2010), Chennai, February 2010.

4. Heman Pathak, "*Application Based Solutions to Locate Mobile Agents in the Global Network*" in the proceedings of the National Conference on Emerging Trends in Mobile Technologies and Security (ETMTS-11) on March 29, 2011 at Maharshi Dayanand University, Rohtak, Haryana.

5. Heman Pathak, K. Garg, Nipur, "*CPN Model for Fault Tolerant Mobile Agent Systems: HFTP, PFTM and SG-ARP*", in proceedings of National Conference on Advance Computing & Communication Technology, Ghaziabad, February 2010.

6. Heman Pathak, K. Garg, Nipur, "*Performance Analysis of Hierarchical Fault Tolerance Protocol for Mobile Agent Systems*", in proceedings of National Conference on Emerging Trends in Computer Science & Information Technology (ETCSIT), Nasik, January, 2010.

7. Heman Pathak, K. Garg, Nipur, "*Fault Tolerance Problem & Challenges for Mobile Agent Systems and Proposed Solution*", in proceedings of National Conference on Communication & Computational Techniques: Current & Future Trends (NCCT – 06), DIT Dehradun, India, pp 381-386, February 2006.

8. Heman Pathak, K. Garg, Nipur, "*Fault Tolerance Approaches for Mobile Agent Systems: A Parameter Based Comparative Study*", in proceedings of National Conference on Trends of Computational Techniques in Engineering (TCTE '2004), SLIET Punjab (India), pp 119-123, October 2004.

Papers Presented in International Conference (14)

1. "Virtual group Based Hierarchical Fault tolerance Protocol for Mobile Agent Systems", in International Conference on information & Communication technology (IICT 2007) Organized by DIT, Dehradun (UK) July 26-28, 2007.

2. "CPN model for Hierarchical Fault Tolerance Protocol for Mobile Agent Systems", in International Conference on Networks (ICON 2008) Organized by IIT Roorkee, at New Delhi December 12-14, 2008.

3. "A Fault Tolerant Comparison Internet Shopping System: Best Deal using Mobile Agents", in International Conference on Information Management and Engineering (ICIME 2009) Organized by Kulalampur Malaysia April 3-5, 2009.

4. "Comparative Performance of Hierarchical Fault Tolerance Protocol for Mobile Agent Systems", in International Conference on Recent Trends in Soft Computing and Information Technology (RTSCIT-090 Organized by CORPORATE Institute of Science & Technology Bhopal (MP) January 9-10, 2010.

5. "Carbon Credits to control the Emission of Green House Gases", in International Conference on Biodiversity and Environmental Governance in Canada and India: Safeguarding Ecosystems for Human Welfare Organized by Centre of Canadian Studies, GKV, Haridwar (UK) October 21-23, 2010.

6. "Design, Validation, Simulation and Parametric Evaluation of a Fault Tolerant Network Trading System Using Mobile Agent", in International Conference on Recent Advances in IT & IT Management (RAITM'12) Organized by SGRRITS, Dehradun (UK) February 28-29, 2012.

7. "Colored Petri Net based Modeling of Hybrid Location Management Mechanism for Mobile Agents", in International Conference on Next Generation Communication and Computing Systems (ICNGC2S-11 Organized by IETAN, Chandigarh March 24-25, 2012.

8. "A Secured Layered Architecture for Mobile Agent", in International Conference on Advances in Computer Engineering & Applications (ICACEA-2014) Organized by IMS Engineering College, Ghaziabad, February 15, 2014.

9. "Trust Model for Hybrid Security Architecture based on Reputation for Secure Execution of Mobile Agents", in International Conference on Advancements in Computing Sciences, Information Techniques & Emerging E-Learning Technologies – (ACSITEET– 2014) Organized by "Krishi Sanskriti" JNU, New Delhi February 22-23, 2014.

10. "Mechanisms to Locate Mobile Agents in Multi Agents Environment" at the International Conference on Modeling and Computing (ICMC-2014) Organized by BBAU, Lucknow 10-11 July, 2014.

11. "Colored Petri Net Based Model for Hybrid Security Architecture based on Reputation for secure execution of Mobile Agents" in the International Conference on Advances in Computing Communications and Informatics Organized by College of Engineering Roorkee in association with CSI, November 28-30, 2014.

12. "Hierarchical Location Management Schemes for Mobile Multi Agents Communication", in International Conference on Innovation and Creativity Management: Future for Sustainable Development (ICM 2014) Organized by IMS, Ghaziabad, November 29, 2014.

13. "Towards Big Data Various Challenges and Trending Applications", in International Conference on Cyber Security, Privacy and Networking (ICSPN 2021) organized from September 17–19, 2021 (in Online Mode).

14. "Strength and Limitations of Publicly Available Anti- Malware Tools Against Obfuscated Malware" in 5th International Conference on Inventive Research in Computing Applications (ICIRCA-2023) organized by RVS College of Engineering and Technology, Coimbatore, India from 3-5 August 2023 (ONLINE).

Papers Presented in National Conference (9)

1. "Fault Tolerance approaches for Mobile Agent Systems: A Comparative Study", in National Conference on Trends of Computational Techniques in Engineering Organized by SLIET, Longowal (Punjab) October 15-16, 2004.

2. "Hierarchical Fault Tolerance Model for Mobile Agent Systems", in National Conference of Society of Statistics, Computer and Applications Organized by Govt. Vidarbha Institute of Science & Humanities, Amrawati (MH) November 28-30, 2005.

3. "Fault Tolerance Problem & Challenges for Mobile Agent Systems and Proposed Solution", in National Conference on Communication & Computational Techniques: Current & Future Trends (NCCT-06) Organized by DIT, Dehradun (UK) February 10-11, 2006.

4. "Performance Analysis of Hierarchical Fault Tolerance Protocol for Mobile Agent Systems", in National Conference on Emerging Trends in Computer Science & Information Technology (ETCSIT2010) Organized by K.K. Wagh Institute of Engineering Education & Research Nasik (MH)January 29-30, 2010.

5. "CPN Model for Fault Tolerant Mobile Agent Systems: HFTP, PFTM and SG-ARP", in National Conference on Advance Computing & Communication Technology Organized by ABES Engineering College, Ghaziabad (U.P.) February 26-27, 2010.

6. "Location Management Mechanisms for Mobile Agents", in National Conference on Evolving Ideas: Computing Communication and Networking Organized by Amrapali Institute of Science & Technology, Haldwani (UK) March 5, 2011.

7. "Security of Mobile Agent in Multi-Agent Environment for E- Business Application", in National Conference on Innovations and Applications in Engineering & Applied Sciences (IAEAS-2011) Organized by FET, GKV Haridwar (UK) November 9-10, 2011.

8. "Layered Architecture to Provide Security to Mobile Agent and its Executing Environment", in National Conference on Emerging Trends in Engineering & Sciences ETES – 2013 Organized by FET, GKV Haridwar (UK) November 9-10, 2013.

9. "Colored Petri Net Based Modeling of Hierarchical Location Management Schemes for Mobile Agents in Multi Agent environment", in 9th Uttarakhand State Science & Technology Congress 2014-15 organized by UCOST Dehradun Uttarakhand, February 26-28, 2014.

Invited Talk (5)

1. "Problem of Locating MA in the global network and proposed solutions" in International Conference on Green Technologies for Environmental Rehabilitation (2011-12) at FET, GKV Haridwar (11-13 February, 2012).

2. "Women Web Developer" in national Workshop on Women Entrepreneurship Development (2011-12) at Kanya Gurukul Mahavidyalaya, Dehradun, (22nd February, 2012).

3. "Location Management Issues Challenges and Solutions" in International conference on Advances in Engineering and Management Research (ICAEMR) HCTL Open Publications Solutions LLP, India on 19th July-2015

4. "Internet Concepts & Internet Security" in Refresher Course on Information Technology ASC, Shimla, H.P. University on 11th July-2015.

5. "Mobile Agent Technology: Scope and Challenges" at Department of Computer Science and Information Technology, Dehradun Institute of Technology (DIT), Dehradun on 9th February-2015.

Session Chaired in Conferences (2)

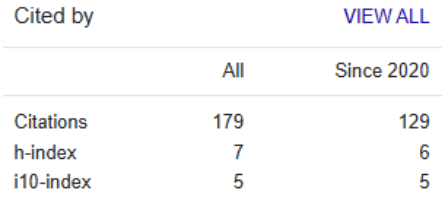
1. Chaired a session in International Conference on Green Technologies for Environmental Rehabilitation (2011-12) at FET, GKV Haridwar (11-13 February, 2012).

2. Chaired a session in International Conference on Recent Advances in IT & IT Management (RAITM'12) (2011-12) at SGRRITS, Dehradun (28-29 February, 2012)

Details of Research Guidance (Enrolled-1, Awarded-5)

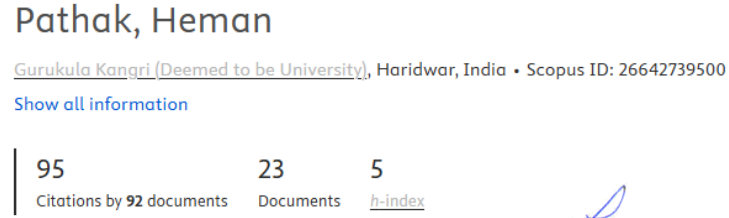
S.N.	Name of Research Scholars	Date of Registration	Date of Award	Title of the Thesis
1.	Swati Singhal	14-09-2012	06-01-2018	Performance Enhancement of Mobile-Multi-Agent System
2.	Anuj Kumar	14-09-2012	25-05-2019	Dynamic Load Balancing in Distributed Systems using Soft Computing Techniques
3.	Surabhi Patel	01-04-2017	17-12-2022	Improvising QoS through Cross Layer Optimization Techniques in Mobile Ad-Hoc Networks
4.	Yashi Chaudhary	01-04-2017	07-09-2024	An Efficient Framework for Big Data Repositories through Data Mining
5.	Bina Kotiyal	28-08-2020	04-11-2024	Big Data Analytics: Performance Enhancement of System for Some Real World Problems
6.	Kiran Aswal	28-08-2020	Enrolled	Malware Detection and Analysis for Android Based Internet of Vehicles

Google Scholar Site Update Till (April, 2025)



Cited by	All	Since 2020
Citations	179	129
h-index	7	6
i10-index	5	5

Scopus Site Update Till (April, 2025)



Date: 11 April, 2025
Place: Dehradun

(Heman Pathak)