



PROFESSIONAL SUMMARY

Accomplished Professor of Computer Engineering with two decades of distinguished experience in cutting-edge research and innovative teaching methodologies. Recognized for fostering curiosity and engagement in the classroom through various pedagogical strategies. Bilingual communicator skilled in leadership development and the application of advanced technology. Earned the prestigious IBM Artificial Intelligence Practitioner badge in 2023 and received further accolades, including the IBM Generative AI Faculty Award. Serves as a Distinguished Editor of the CSI Journal of Computing, with extensive expertise in cloud computing and blockchain, and has led over 150 workshops and faculty development programs. Awarded the IBM Skills Build Champion Award 2024, IBM TGMC Mentor Award 2013, the USERC DST Cloud Mentor distinction, and honored with titles such as Best Teacher and Most Popular Teacher of FET. The innovator behind developing a pioneering Blockchain course featured on the SWAYAM Portal.

SKILLS

- Artificial Intelligence(AI), Generative AI, Machine Learning(ML)
- Cloud Computing: KVM / QEMU / Libvirt /Virtualization, CloudSim, Load Balancing, Energy Efficiency, QoS, Compilers, IBM Bluemix, Microsoft Azure, Python.
- Fog Computing: iFogSim
- Blockchain: Ethereum, Smart Contract, Remix, Truffle.
- Good communication skills, Confidence, and early and quick learning skills.

WORK HISTORY

Lecturer

DITU, Dehradun, Uttarakhand, INDIA (09/2002 -04/2003)

Was the first teacher in college to give 100% results in U. P. Technical University in Compiler. Was actively involved in various committees. Taught 'C' Language to first-year students.

Professor and Head Dept. of Computer Science & Engineering

Gurukula Kangri University, Haridwar, Uttarakhand, INDIA (04/2003 –Current)

Fostered students' commitment to lifelong learning by connecting course materials to broader themes and current events. Initiated and had MoUs with TCS / IBM / EMC². Served on various university committees and acted as chair of various committees like Discipline, UGC grants, Website, Personality Development, etc. Pioneer to Conduct the Conference in Engineering as Organizing Secretary. Guided over 500 UG (B. Tech) students in Projects and about 20 PG students. Have successfully guided one Ph.D. scholar at UTU-Dehradun. Takes care of the department as HOD, and is also responsible for university examinations as Deputy Controller of Examinations. In the past, I have contributed as Hostel Warden, Deputy Chief Hostel Warden, Placement Officer, and Website Administrator as an additional responsibility.

PATENTS

1. Mayank Aggarwal, Krishna Rajput, Aditya Tripathi, Ashutosh Bhat. "System and Method to securely store data across network in distributed database to rehabilitate river". Published in Official Journal of Patent Office. Issue No 23/2020. Date 05/06/2020. Application No: 202011017541.
2. Sumit Bansal, Mayank Aggarwal, Himanshu Agarwal. "A cloud fog based architecture for smart healthcare system for industry and society purpose." **Granted** by the Australian Government (Innovation Patent). Patent No: 2021107417. Dated 25, August, 2021.
3. Mayank Aggarwal et al. "System and Method for reporting information related to drug trafficking anonymously". Application No: 202211029346, Patent Number: 517709, Dated: 21/05/2022, **Granted** Date: 29/02/2024
4. P.K. Bharti, Pramod Kumar, Mayank Aggarwal et al. "Method for leveraging of IoT and Artificial Intelligence for enhanced data security". Date 20/01/2023. Application No: 202311001305.
5. P.K. Bharti, Pramod Kumar, Mayank Aggarwal et al. "Artificial Intelligence and Internet of Things based system for enhanced fog management in smart cars". Date 20/01/2023. Application No: 202311001292.
6. Shashi Bhutan, P.K. Bharti, Pramod Kumar, Mayank Aggarwal et al. "Home security revolutionizing methods using integration of IoT and Artificial Intelligence". Date 20/01/2023. Application No: 202311001302.
7. Shashi Bhushan, P.K. Bharti, Pramod Kumar, Mayank Aggarwal et al. "Method for enhancing bank security with IoT and Artificial Intelligence". Date 20/01/2023. Application No: 202311001303
8. Pramod Kumar, Mayank Aggarwal et al. "Method for enhancing shopping mall security with IoT and Artificial Intelligence". Date 20/01/2023. Application No: 202311001304

PROJECT

1. "Development of Blockchain Platform(NGBP) for awareness, verification, validation, record keeping and rewarding for cleaning of Holy river Ganga" sanctioned by UCOST in March 2023.

MOOCS COURSE DEVELOPED

1. A course on Blockchain at the SWAYAM portal.

RECENT PUBLICATIONS

*Paper titled " A holistic review of Image to text conversion: Techniques, Evaluation Metrics, Multilingual Captioning, Storytelling and Integration", Springer Nature Computer Science, Online ISSN 2662-995X, Vol 6, Article No 255, 25 Feb, 2025, <https://doi.org/10.1007/s42979-025-03719-6> (Scopus)

*Paper titled "Blockchain-Based trust and AI driven water quality prediction in river systems", Springer Nature Computer Science, Online ISSN 2662-995X, Vol 5, Article No 954, 12 Oct, 2024, <https://doi.org/10.1007/s42979-024-03315-0>. (Scopus)

*Paper titled "Evaluating simulation tools for securing sensor data with blockchain: A comprehensive analysis", June 2024, Measurement Sensors, Online ISSN 2665-9174. (Scopus)

*Paper titled "Machine learning based study on Aphid Infestation in agriculture crop at Uttarakhand", Feb,2024, Advances in Food Sciences, Online ISSN 1431-7737. (WoS)

*Paper titled "My Easy Healthcare: An efficient and secure three-tier Blockchain-based health care system", March 2023, Security and Privacy, Wiley, March 2023, Online ISSN 2475-6725. (ESCI)

*Paper titled "An Extensive Blockchain Based Applications Survey: Tools, Frameworks, Opportunities, Challenges and Solutions", *IEEE Access*, Nov 2022, Online ISSN 2169-3536 (SCIE)

*Paper titled "A systematic review of Task scheduling approaches in fog computing", *Transac. Emerging Technologies*. May, 2022, ISSN 2161-3915. (SCIE)

*Paper titled "Optimization and Prediction of Karanja Oil Transesterification with Domestic Microwave by RSM and ANN", *International Journal of Ambient Energy*, Dec 2020, (Online First), Online ISSN 2162-8246. (Scopus/ESCI)

*Paper titled "Optimal Elliptic Effective Approach for Secure Data Storage in Clouds", *International Journal of Knowledge and Systems Science*, Nov 2020, Vol 11 No 4, ISSN 1947-8208, pp 65-81. (ESCI/Scopus Indexed)

* Paper titled "Effective Cryptographic Renewal Method with Rivest-Shamir-Adleman, Modified Artificial Bee Colony Optimization to Achieve Secure Cloud Storage and Computation in Cloud Computing ", *Journal of Computational and Theoretical Nanoscience*, June 2020, Vol 17 No 6, ISSN 1546 1955, pp 2702-2708(Scopus Indexed)

*Paper titled, "Machine Learning based Model to Combat Covid-19", *International Journal of Information Technology and Electrical Engineering*, Aug 2020, Vol 9 Issue 4, ISSN 2306-708X, pp 33-40(UGC Indexed).

*Paper titled, "Fuzzy Rule-based System to Predict Covid-19 a Deadly Virus", *International Journal of Management and Humanities*, April 2020, Vol 4 Issue 8, ISSN 2394-0913, pp 78-82(UGC Indexed).

*Paper titled, "A Technological Review on Scheduling Algorithm to Improve Performance of Cloud Computing Environment", *International Journal of Technology and Exploring Engineering*, April 2019, Vol 8 Issue 6C, pp 166-72. ISSN 2278-3075(Scopus Indexed)

*Paper titled, "AN ENHANCED SCHEDULING APPROACH WITH CLOUDLET MIGRATIONS FOR RESOURCE INTENSIVE APPLICATIONS", *Journal of Engineering Science & Technology*, Aug 2018, Vol 13 No8, pp 2299-2317. ISSN 1823-4690(Scopus / ESCI Indexed)

*Paper titled, "Optimized Cost Model with Optimal Disk Usage for Cloud", *Big Data Analytics-Advances in Intelligent Systems and Computing* (Springer, Singapore), 2018, Vol 654, pp 481-485, ISSN 2194-5357(Scopus Indexed)

*Paper titled, "Energy Efficient DVFS with VM Migration", European Journal of Advances in Engineering & Technology, Feb 2018, Vol 5(1), pp 61-68, ISSN: 2394-658X. UGC-47799

*Paper titled, "A Comparative Study on Scheduling Algorithms in Cloud Computing", International Journal of Advanced Research in Computer Engineering & Technology, January 2018, Vol 7(1), pp 19-24, ISSN:2278-1323, UGC-47442.

*Paper titled "File Specific Deduplication for Cloud Storages", International Journal of Applied Research on Information Technology and Computing. Vol 8(3), Dec,2017, pp 293-302. ISSN: 0975-8089.UGC-2578

*Paper titled "Performance Evaluation of E-Learning Sites", Int. J. of Computer Eng. And Scientific Research, Vol4 (9), Sept 2017, pp 18-22, 2394-0697.UGC Approved S. No: 43032

*Paper titled "Impact of Cloud Computing in E-Learning: A Study", Int. J. of Recent and Innov. Trends in Comp. & Comm., Vol5 (5) May 2017, pp 912-922.UGC Approved, S. No: 519

*Paper titled "Survey of ndn: future internet", Int. J. of Inf. Tech., Springer, Online First, May 2017, ISSN (Online): 2511-2104.DOI: 10.1007/s41870-017-0014-y. UGC Approved, S. No-49273

Paper titled "An Effective Security Mechanism for on-Demand File Storage in Cloud Computing", ANWESH: International Journal of Management and Information Technology, Vol 2(1), March 2017.UGC Approved S. No-47129.

*Paper titled "Smart City Based on NDN: The Future of IoT, Published in Indian Journal of Science & Technology, Vol 9(36), Sept. 2016, pp 142-147, ISSN (Print): 0974-6846. Scopus Indexed. DOI: 10.17485/ijst/2016/v9i36/89557.

*Paper titled "Impact of Cloud-based services on Mental Health", Published in IJECS, Vol 4(8), Aug 2015, pp 13653-13663, ISSN 2319-7242.

*Paper titled "Virtualization: Technology Helping Environment", Published in IJERC, Vol 1, June 2015, pp 58-62, ISSN 0975-6272.

*Paper titled "A Comparative Analysis of Scheduling Algorithms Affecting QoS in Cloud Environment" Published in IJCSN, Vol 4(1), Feb 2015, pp 142-147, ISSN 2277-5420.

*Paper titled "An application Deployment to Open Shift Cloud Using existing Git Repository from Local Client" Published in IJECS, Vol 4(1), Jan,2015, pp 10191-10194, ISSN 2319-7242

*Paper titled "Doctor App: A Life-Saving Mobile Application" Published in IJCSIT, Vol 5(5), 2014, pp 6290-6295, ISSN 0975-9646. (SciVerse Scopus Indexed)

*Paper Titled "Research Issues in Cloud Computing" published in IJAER, (Scopus Indexed), Vol 9(21), 2014, pp 9479-9488.ISSN:0973-4562. UGC Approved, S. No-64529

*Paper Titled "Virtualization: A concept implementation for Cloud" published in IJETR. Vol 2, Issue 3, March, 2014, pp 52-55. ISSN: 2321-0869

*Paper Titled "Agro App: An application for healthy living" presented at International Conference "ISCON-14" held at GLA, Mathura (1-2, March 2014). Published in IEEE

*Paper titled " Introduction of Cloud Computing and Survey of Simulation Software for Cloud" published in International Journal Research Journal of Science & IT Management, Vol 2, No. 12, Oct, 13, pp. 15-23. ISSN: 2251-1563.

*Paper titled "Hierarchal Fault Tolerant Secured Mobile Agent Model", presented in 27th Indian Engineering Congress, Delhi, 13-16 Dec 2012.

*Paper titled "Hierarchical Model to Prevent DoS Attack in Mobile Agent", presented in International Conference ICRTITCS-2012, Mumbai, 16-17 Dec, 2012.Proceedings published in IJCA, pp. 7-10.

*Paper titled "Hierarchal Secured Fault-Tolerant Approach for Mobile Agent: Using Petri nets" published in Journal of Information Systems and Communication (Bio Info Publications) Vol. 3, Issue 1, 2012 pp. 170-173. ISSN: 0976-8742.

*Paper titled "Role of mobile agent in Digital Education" presented at the World Congress for Man and Nature held at GKV from 11-13 Nov 2011.

*Paper titled "Hierarchal Object Oriented Fault Tolerant Secured and Atomic Mobile Agent Model" published in International Journal of Computer Science Issues (IJCSI) Volume 8, Issue 6, November 2011 pp. (241-245).

*Paper titled "Mobile Agent Model for IT in Education System" published in J.N.P.S Vol. 24, No. 1, pp. 69-75(2011), ISSN 097-3799, (Proceedings of IAES -Nov 2011)

BOOKS

Authored a Chapter titled "Edge AI and Blockchain: A Synergy for Water Body Preservation" in the Book titled "Edge Artificial Intelligence: Foundations, Techniques, and Applications", Wiley, Chapter 20 pp 469-500, Nov,2025, Online ISBN:9781394355037.

Authored a Chapter titled "Edge-AI Ledger Docs: Revolutionising Document Storage and Verification with Blockchain" in the Book titled "Edge Artificial Intelligence: Foundations, Techniques, and Applications", Wiley, Chapter 11 pp 277-305, Nov,2025, Online ISBN:9781394355037.

Authored a Chapter titled "Securing and Authenticating Vedic Documents: A blockchain based approach" in the Book Titled "Advances in Mathematics for Engineering Sciences" by Springer, Chapter 13 pp 255-266, Sept 2025. eBook ISBN: 9781003488255 (Conference Publication)

Authored a Chapter titled "Navigating the ethical cross roads of Gen AI in health care" in the Book Titled "Gen AI in Healthcare" by CRC Press., Chapter 6, July 2025. eISBN: 9781003488255

Authored a Book titled "Cloud & Code: A Comprehensive Guide to Python Web Development and Cloud Integration", Publisher Shroff Publishers & Distributors Pvt. Ltd., March, 2025. ISBN: 978-93-5542-834-9. PP-136

Authored a Book titled "Handbook of AWS (A Practical Guide)", Publisher Bluerose, Feb,22. ISBN-978-9356110212. pp -168.

Authored a Chapter titled "Forecast and Prediction of Covid-19 using Machine learning" in the Book Titled "Data Science for Covid-19" by Elsevier Publications.

Authored a Chapter titled " IBM's Watson Analytics for Health: A Miracle Made True" in the Book Titled "Cloud Computing Systems and Applications in Health Care" by IGI Global Publications.

Authored a Chapter titled "Advancement and Applications in Fog Computing" in the Book Titled "Security Design for the Cloud IoT and Social Networking" by Wiley Publications.

Authored a Chapter titled "Smart Contract Deployment in Ethereum: Learning Made Easy" in the Book Titled "Transforming Cybersecurity Solutions Using Blockchain" by Springer.

Thesis Supervised

- Guided more than 20 students in PG for their PG Thesis.
- One Scholar (Anju Malik) Awarded a Ph.D. on the topic titled "An Effective Cryptographic Algorithm for Renewal and Signing to Achieve Secure Cloud Storage and Computation" from Uttarakhand Technical University, Dehradun, UK, India. (12/3/2019)

- One Scholar (Kanika Agrawal) Awarded a Ph.D. on the topic titled “Design and development of an efficient decentralised framework for healthcare 4.0” from Gurukula Kangri Deemed to be University. (5/2/2025)

RESOURCE PERSON (Most of the talks are conducted with Hands-On Workshops)

1. Resource person, one week AICTE-sponsored ATAL FDP, “Frontiers of technology from Cloud to Gen AI: With focus on IBM Cloud”, MSU, Baroda, 10/11/25.
2. Key Note speaker, International Sparsh Himalayan Uttav-2025, “Human Intelligence, AI and Hindi Language”, at Lekhak Gao, 4/11/25.
3. Resource Person, National Seminar on ‘India’s Role in bridging the global AI divide”, SRHU, Dehradun supported by IEEE, 31/10/25.
4. Resource Person, Two days’ Workshop, DBIT, Dehradun. 24-25, October,202
5. Key Note Speaker, International Conference on Recent Trends in Artificial Intelligence (ICRTAI-2025), S.D. Suman University, Rishikesh. 15/10/25
6. Resource Person, One Week AICTE Sponsored ATAL FDP, at MIT, Meerut. 17/6/25.
7. Resource Person, One Week UGC Sponsored Refresher Course, at GNDU, Amritsar 3/2/25.
8. Resource Person, One Week UGC Sponsored STC on Cyber Crime and Cyber Security, at Kurukshetra University, Kurukshetra, 28/11/24.
9. Resource Person for a two-day workshop on “Exploring Blockchain and Artificial Intelligence Using IBM Watson” at Uttaranchal University, Dehradun, 7-8 October 2024.
10. Resource Person in a two-day workshop on “Exploring Blockchain and Artificial Intelligence Using IBM Watson” at Shobit University, Gangoh, during a pre-conference workshop of the International Workshop, 17-18, Oct, 2024.
11. Resource Person in a two-day workshop on “Exploring Blockchain and Artificial Intelligence Using IBM Watson” at Uttaranchal University, Dehradun, under the aegis of IEEE 7-8, October 2024.
12. Keynote Speaker, National Conference on “Recent Innovations in Engineering Science & Technology”, at JBIT Dehradun sponsored by USERC on 21/09/2024.
13. Resource Person in One Week Online STC sponsored by UGC on “Securing Applications using Blockchain” at GNDU, Amritsar, 14/9/24.
14. Resource Person/Invited talk on “Exploring Blockchain” at a workshop at Haridwar University on 14/09/24.
15. Resource Person in a two-day workshop on “Blockchain and Artificial Intelligence” at DBU, Dehradun, under the aegis of IEEE 7-8, September 2024.
16. Coordinator for a session at AI Conclave for Uttarakhand organized by UCOST 5/08/2024.
17. Conducted hands-on workshop on “Exploring Blockchain and AI Using Ethereum and IBM Watson” at Chitkara University, Chandigarh (15-18, July,2024)
18. Resource Person in one-week FDP on “Use of AI in higher education system hands-on with IBM Watson”, at Chitkara University, 24 April 2024. (Online mode)
19. Resource person in Workshop conducted at SRHU, Jollygrant, Dehradun on “Exploring AI Using IBM Watson”, 9 April 2024.
20. Resource Person/Invited Talk on “Journey of Technology” at Uttarakhand Science Congress conducted by UCOST, Dehradun at UoU, Haldwani 7-9, Feb,2024.
21. Resource Person/Invited Talk on “Role of Artificial Intelligence in Agriculture-Exploring IBM Tools” in National Seminar by Punjabi University, Patiala on 21.11.23.
22. Resource Person/Invited Talk on “Artificial Intelligence and Machine Learning” in Skills Enhancement course conducted by Punjab University, Chandigarh on 9.11.23.
23. Resource Person/Invited Talk on “Artificial Intelligence- Generative AI” in UGC Sponsored refresher course by Kurukshetra University, Kurukshetra on 4.11.23.
24. Resource Person/Invited Talk on “Innovations in Technology” in UGC Sponsored refresher course by Kurukshetra University, Kurukshetra on 3.11.23.
25. Resource Person/Invited Talk on “Innovations in Technology” in the International Conference conducted by Glocal University, Saharanpur on 1.11.23.

26. Resource Person/Invited Talk on "Artificial Intelligence and Generative AI" in a COER, Roorkee workshop on 18.10.23.
27. Resource Person/Invited Talk on "Blockchain Technology" in a workshop conducted by DBU, Dehradun, on 14.9.23.
28. Resource Person/Invited Talk on "Blockchain Technology" in a workshop conducted by COER, Roorkee, on 12.9.23.
29. Resource Person/Invited Talk on "Smart Contracts and its application towards daap" in one-week STTP conducted by UTU, Gujrat, and CITK, Assam on 5/7/23.
30. Resource Person/Invited Talk on "Blockchain structure and its Emerging Applications" in one-week STTP conducted by UTU, Gujrat, and CITK, Assam on 4/7/23.
31. Resource Person/Invited Talk on "History of Blockchain and its evolution" in one week STTP conducted by UTU, Gujrat and CITK, Assam on 4/7/23.
32. Resource Person/Invited Talk on "Exploring Blockchain" in FDP conducted by Sharda University, Noida on 29/6/23.
33. Resource Person/Invited Talk on "Research Methodology" in Workshop conducted by UETR, Roorkee, sponsored by USERC on 28/2/23.
34. Resource Person/Invited Talk on "Security Using Blockchain" in FDP on "Cyber Security" conducted by COER, Roorkee, sponsored by USERC on 8/2/23.
35. Resource Person/Invited Talk on "Blockchain Smart Contracts" in Workshop conducted by IIIT Kota on 28/11/22 and 29/11/22.
36. Resource Person/Invited Talk on "Cryptocurrency a new era in virtual labor market and legal issues" in FDP conducted by GNDU, Amritsar on 13/7/22.
37. Resource Person/Invited Talk on "Blockchain and Applications" in FDP conducted by RECM, Nagpur on 14/6/22.
38. Resource Person/Invited Talk on "Decentralized Application Development - Blockchain" in Workshop conducted by DEPSTAR-CHARUSAT, Gujrat on 2/3/22.
39. Resource Person/Invited Talk on "Advancements in Technologies" in Seminar conducted by COER, Roorkee, sponsored by USERC on 06/02/2022.
40. Resource Person/Invited Talk on "Securing Applications by Blockchain" in FDP conducted by M.J.P. Rohilkhand University, Bareilly, under the AICTE-ATAL Program on 15/11/2021.
41. Resource Person/Invited Talk on "Ethereum and Smart Contracts" in FDP conducted by Poornima University, Jaipur, under the AICTE-ATAL Program on 24/09/2021.
42. Resource Person/Invited Talk on "Blockchain Introduction and History" in FDP conducted by Poornima University, Jaipur under AICTE-ATAL Program on 21/09/2021.
43. Resource Person/Invited Talk on "Smart Technologies" in FDP conducted by FET, GKV, Haridwar on 20/9/21.
44. Resource Person/Invited Talk on "Cyber Security" in Refresher Course conducted by UGC HRDC, GNDU Amritsar on 13/9/21.
45. Resource Person/Invited Talk on "Basics of Blockchain" and "Consensus Mechanism" in FDP conducted by MNIT, Jaipur, under AICTE/ATAL Program on 6/9/2021.
46. Resource Person/Invited Talk on "Blockchain and Machine Learning" in FDP conducted by Uttarakhand Open University, under AICTE/ATAL Program on 17/8/2021.
47. Resource Person/Invited Talk on "Hands-on Building Smart Contract using Remix" in FDP conducted by AURO University, Surat on 6/7/2021.
48. Resource Person/Invited Talk on "Blockchain Background" in FDP conducted by AURO University, Surat on 5/7/2021.
49. Resource Person/Invited Talk on "Blockchain Introduction and History" in FDP conducted by AURO University, Surat on 5/7/2021.
50. Resource Person/Invited Talk on "Securing Applications by Blockchain" in FDP conducted by Govt. Engineering College, Bikaner under AICTE/ATAL Program on 23/06/2021
51. Resource Person/Invited Talk on "Academic Leadership and Virtual Spaces" in FDP conducted by FET, GKV under AICTE/ATAL Program on 19/05/2021
52. Resource Person/Invited Talk on "Academic Leadership and Virtual Spaces" in FDP conducted by FET, GKV under AICTE/ATAL Program on 19/05/2021.
53. Resource Person/Invited Talk on "Blockchain Technology and applications" in FDP conducted by AMET University, Chennai under AICTE on 19/12/2020.
54. Resource Person/Invited Talk on "Hands-on with Blockchain using remix" in FDP conducted by FET, GKV, Haridwar under AICTE ATAL on 16/12/2020.

55. Resource Person/Invited Talk on "Introduction to Blockchain" in FDP conducted by FET, GKV, Haridwar under AICTE ATAL on 14/12/2020.
56. Resource Person/Invited Talk on "Hands-on with Blockchain using remix" in FDP conducted by JNTU, Ananthapuram, A.P under AICTE on 11/12/2020.
57. Resource Person/Invited Talk on "Challenges and Solutions Solution Impact of ICT" in UGC/HRDC Refresher Course conducted by BAMU, Aurangabad on 20/10/2020.
58. Resource Person/Invited Talk on "Blockchain Technology and applications" in FDP conducted by SRMS, Bareilly on 16/10/2020.
59. Resource Person/Invited Talk on "Blockchain and its Applications" in FDP conducted by Poornima University, Jaipur under RTU/TEUQIP Program on 18/09/2020.
60. Resource Person/Invited Talk on "Hands-on Remix" in FDP conducted by NIT-Raipur under the AICTE/ATAL Program on 17/09/2020.
61. Resource Person/Invited Talk on "Academic Leadership and Virtual Spaces" in FDP conducted by FET, GKV under AICTE/ATAL Program on 16/09/2020.
62. Resource Person/Invited Talk on "Blockchain Introduction Background and History" in FDP conducted by RTU-Jaipur under TEQIP on 15/09/2020.
63. Resource Person/Invited Talk on "Deploying Smart Contract using Remix" in FDP (Online) conducted by GTU, Ahmedabad on 3/9/2020 and 4/9/2020.
64. Resource Person/Invited Talk on "Blockchain Technical Perspective" in One Month Orientation Course (Online) conducted by CSI/IEEE/AICTE/BVICAM, Delhi on 20/8/2020.
65. Resource Person/Invited Talk on "Understanding Blockchain Made easy" in Webinar conducted by GJU, Hissar on 13/8/2020.
66. Resource Person/Invited Talk on "Deploying Smart Contract using Remix" in FDP (Online) conducted by GBPEC, Pauri on 20/7/2020 and 21/7/2020.
67. Resource Person/Invited Talk on "Blockchain and Industry4.0" in FDP (Online) conducted by CSI/IEEE/AICTE/BVICAM, Delhi on 8/7/2020.
68. Resource Person/Invited Talk on "Deploying Smart Contract using Remix" in STC (Online) conducted by AICTE/IBM/GKV on 29/6/2020 and 30/6/2020.
69. Resource Person/Invited Talk on "Understanding Blockchain Made easy" in Webinar conducted by Vivek College on 6/6/2020.
70. Resource Person/Invited Talk on "How to use exam.net to give Online Examination" in Webinar conducted by GKV, Haridwar on 25/5/2020.
71. Resource Person/Invited Talk on "Exploring remix to implement Smart Contracts" in Webinar conducted by BVICAM, Delhi on 29/5/2020.
72. Resource Person/Invited Talk on "Impact of Technology on Youth and Society" during Orientation Program for NSS officers" being conducted by Empaneled Training Institute under Ministry of Youth Affairs and Sports, Government of India on 22, Feb,2019.
73. Resource Person/Invited Talk and Hands On Workshop under TEQIP-UTU at COER, Roorkee on "Blockchain and IPR", 27, Nov,2019
74. Resource Person/Invited Talk and Hands-on Workshop at Manav Rachna University, Faridabad on "Blockchain Technology/Ethereum", 5, Oct, 2019.
75. Resource Person/Invited Talk and Hands-on Workshop at Govt. Engineering College, Bikaner on "Blockchain Technology/Ethereum", 3-4, Oct, 2019.
76. Resource Person/Invited Talk and Hands-on Workshop at SCET, Surat, Gujrat on "Blockchain Technology/Ethereum", 31, August 2019.
77. Workshop in FDP at BVM, Vidyanagar, Gujrat on "Blockchain Technology/Ethereum", 10, June 2019
78. Resource Person/Invited Talk in IEEE International Conference at KEC, Ghaziabad on "Block Chain Technology", 18, April, 2019.
79. Resource Person/Invited Talk/Workshop at Chitkara University, Punjab on "Block Chain", 16, March, 2019
80. Resource Person/Invited Talk/Workshop in FDP at FGC, Bareilly on "Cloud Computing and Cloud Sim", 5, January 2019.

81. Resource Person/Invited Talk in FDP at UTU, Dehradun on "Research and Innovations", 13, July 2018.
82. Resource Person/Invited Talk in IEEE National Workshop at WIT, Dehradun on "Blockchain in Bigdata", 21, April, 2018.
83. Resource Person/Invited Talk in Workshop at MKIT, Dehradun on "Blockchain", 21, April, 2018.
84. Resource Person/Invited Talk in Workshop at DBIT, Dehradun on "Blockchain", 31, March, 2018.
85. Resource Person/Invited Talk in Workshop at COER, Roorkee on "Blockchain", 15, March, 2018.
86. Resource Person/Invited Talk in National Workshop at M.S. University, Baroda, Gujarat on "Blockchain in data", 21, Feb, 2018.
87. Resource Person in FDP on Research Methodology at Uttarakhand University, Dehradun on 6 Dec, 2017
88. Resource Person UGC, HRDC Refresher course at MDSU, Ajmer 10-11, Oct, 2017.
89. Resource Person/Invited Talk in UGC Sponsored FDP at Guru Nanak Khalsa College, Yamunanagar on 16, Sept, 2017.
90. Resource Person/Invited Talk on Cloud Computing and Bluemix in a Workshop at HIT, Jolly Grant, Dehradun on 6 May,
91. 2017.
92. Resource Person in Workshop on Cloud Computing and VMware at WIT, Dehradun on 6 April, 2017
93. Resource Person in FDP on Cloud Computing and Cloud Sim at LPU, Jalandhar on 18, Feb 2017.
94. Resource Person in National Workshop at Govt. College Kotdwar in collaboration with U-SAC, Dehradun on 30 Nov, 2016.
95. Research Methodology lectures for Ph.D. Candidates of UTU, Dehradun on 27-28, Dec, 2016.
96. Resource Person/Invited Talk in National Workshop by U-SAC, Dehradun on 30 Nov, 2016 at Kotdwar.
97. Role of Computers in Research for Ph.D. Candidates of UTU, Dehradun on 28 June 2016.
98. Talk on Cloud Computing and Bluemix in a Workshop at COER, Roorkee on 28 April 2016.
99. Delivered five Sessions with Hands-on Experience on Cloud Computing and Cloud Sim in a Workshop at Punjabi University, Patiala on 11-12 April 2016
100. Talk on Cloud Computing and IoT during Workshop/FDP "Microwave and Wireless Communication" at M.J.P. Rohilkhand University, Bareilly on 1 April, 2016.
101. Workshop on Cloud Computing and Cloud Sim at DIT, Dehradun on 8 Feb, 2016.
102. Workshop on Cloud Computing and Cloud Sim at CEC, Chandigarh on 28 Jan, 2016.
103. Workshop on Cloud Computing and Bluemix at MEC, Bikaner on 9 Jan, 2016.
104. IAM tools for Cloud Security in CSI Annual Golden Jubilee 2-5, Dec, 2015 at New Delhi.
105. Workshop on Cloud Computing and Bluemix at SGRR, Dehradun on 7, Nov, 2015.
106. Workshop on Cloud Computing and Bluemix at RIT, Roorkee on 4, Nov, 2015.
107. Expert Lecture on Cloud Computing and Research Issues in FDP at IFTM, Moradabad on 2, Nov, 2015.
108. Delivered three hour talks on Programming in Cloud Sim & BlueMix at Three Day Workshop in Kurukshetra University, Kurukshetra on 22 September 2015.
109. Delivered two talks on Cloud Computing & BlueMix at Workshop in IMT, Kashipur on 11 September 2015
110. Session Chair in International Conference "NGCT" at UPES, Dehradun 5, Sept., 2015
111. Conducted and delivered a session on Cloud Computing & BlueMix at Workshop in DIT, Dehradun on 4 September 2015
112. Expert Talks (5 Sessions) in National Workshop for
113. Capacity Building / FDP on Cloud Computing at I.P. University, Delhi on 29 and 30, July, 2015.
114. Key Note speaker in International Conference on Advances in Emerging and Futuristic Trends in Engineering & Technology from 8-9 May, 2015 held at MAU, Baddi (H.P).
115. Session Chair in International Conference on Advances in Computing and Communication Engineering (ICACCE -2015) on 1-2 May, 2015 held at Tula Institute, Dehradun.
116. Conducted a One Day Workshop as Resource Person at Chandigarh University on 23, April, 2015 on Cloud Computing and Cloud Sim.

117. Resource Person/Invited Talk on “Cloud Computing and Sustainable Development” in National Seminar” Sustainable
118. Development with reference to present Indian Scenario”, 14, March, 2015. Conducted by BSI, Roorkee.
119. Session Chair in International Conference “IndiaCom-2015 Computing for Sustainable Global Development”. 11-13 March, 15. Conducted by BVICAM, New Delhi.
120. Resource Person/Invited Talk on “Cloud Computing for Sustainable Global Development” in International Conference “IndiaCom-2015 Computing for Sustainable Global Development”. 11-13 March, 15, Conducted by BVICAM, New Delhi.
121. Resource Person/Invited Talk on “Cloud Computing” in International Resource Person/Invited Talk on “Issues and Challenges in Cloud Computing” in National Seminar Advances in Computer Networking and Information Security on 22 Nov., 2104 at SRMS-WCET, Bareilly. Conference on Advances in Computing,
122. Communications & Informatics on 29, Nov, 2104 at COER-Roorkee.
123. Chaired a Session in International Conference “Confluence-2014” at Amity University, Noida. 25-26 Sept, 14.
124. Resource Person/Invited Talk on “Cloud Computing: Concepts” at National Conference at Shobhit University, Gangoh on 12/4/14.
125. Chaired a Session in INDIANCom-14 held at BVIAM, New Delhi on 7 March, 2014.
126. Resource Person/Invited Talk on “Technical Innovations for Inclusive Development” in National Symposium by ISCA-Haridwar Chapter hosted at GKV, Haridwar (16, Feb, 14)
127. Resource Person/Invited Talk on “Mobile Applications and Cloud Computing: A new approach for Inclusive Development” in Indian Science Congress, 3-7, Feb, 2014 held at Jammu University, Jammu.
128. Invited Speaker/Co-Chairperson in National Conference “Emerging Trends in Computational Research and Development” at DSVV, Haridwar 7-8 Sept., 2013.
129. Invited Speaker in National Workshop on Green Computing at B.I.T Muzzafarnagar on 2 May, 2013
130. Invited Speaker in National Seminar at B.S.I Roorkee on 14 March, 2013.
131. Invited Speaker in National Conference on “Future Aspects of Artificial Intelligence in Industrial Automation” 19-20 May, 2012 held at Graphic Era University, Dehradun.
132. Guest Speaker in National Seminar on” Body Implanted Microsystem Technology”, 9 April, 2011. Organized by Uttaranchal College of Technology, Dehradun.
133. Chaired / Key Note Speaker at a State Level Seminar on “I.T and Its Applications”, 14 March 2011, conducted at B.S.I Group of Colleges, Roorkee.
134. Delivered two expert lectures in Refresher Course in I.T Applications at S.S.J Campus, Almorah, Kumaon University on 3-Dec-2011 and 4-Dec-2011.
135. Key Note Speaker in National Seminar on “Industrial Automation and Soft Sensors”-4-5 September, 2010. Organized by Graphic Era University, Dehradun.
136. Delivered expert lectures on Design and Analysis of Algorithm for M. Tech I Year students of U.K. Technical University at College of Engineering, Roorkee -June 2010.
137. Delivered expert lectures on Object Oriented Software Engineering for M. Tech II Year students of U.K. Technical University at DIT, Dehradun –July 2010.
138. Key Note Speaker at National seminar on Advance Computing & Communications- Aug 25& 26, 2007. Invertis Institute of Eng. & Technology, Bareilly.

EDUCATION

Certification:

IBM(Practitioner Badge)	<i>Artificial Intelligence</i>	2023
AI/ML/Generative AI/Watson/Watsonx		
Buffalo University, New York(Coursera)	Blockchain	2020
Blockchain Specialization (4 Courses)		
Dudley College, UK – Sponsored by AICTE	CMI-Level 5	2019
CMI Level 5 , certification under AICTE-UKEIRI Leadership Development Program		

Institute of Technology (IIT) -Delhi

Worked under the Guidance of Dr. Pragya Jain and Dr. K. Gopal to Build a prototype of IIT-Delhi

cloud "Baadal." Worked on Libvirt/QEMU/KVM, VMware, and Dedupe.

Ph.D.: Computer Science(Mobile Agents) ***Gurukul Kangri University*** -Haridwar **2012**

Worked under the guidance of Dr. Nipur. The research topic was "Fault Tolerance and Security Issues

in Mobile Agents". I made a new secured fault tolerance model and simulated it using Petrinets.

M.Tech: Computer Science **2006**

Scored 68%.

B. Tech: Computer Science **2002**

Scored 84%.

2002

I received a scholarship for seven semesters for being a university topper in Computer Sc. & Engineering Gold Medalist, and I was conferred with B.Tech (Hons.) securing 84 %.

MEMBERSHIPS

- Member Institution of Engineers (MIE) .
- Life member of the Computer Society of India.
- Hon. Secretary, Computer Society of India, Haridwar Chapter. (2014-2016)
- Vice Chairman, Computer Society of India, Haridwar Chapter (2016-2017)
- Chairman, Computer Society of India, Haridwar Chapter (July 2017- June 2018)
- Life Member Indian Science Congress
- Member Board of Studies D.I.T University, Dehradun; Uttarakhand Sanskrit Academy, Haridwar; Jiwaji University, Gwalior; Uttarakhand Technical University, Dehradun, Kurukshetra University
- Member RDC Uttarakhand Technical University, Dehradun; G.B.P.E.C, Pauri, Garhwal, IIS University, Jaipur.
- Editorial Board Member of "International Journal of Current Engineering and Scientific Research", UGC Approved Journal.
- Editor CSI Journal of Computing.

ADDITIONAL INFORMATION

- IBM practitioner badge holder for AI
- One of the few academicians in India Selected by IBM to train students on the IBM Watsonx-Generative AI Tool. Launched in 2023.
- IBM Cloud Consultant-2015
- Awarded by IBM - IBM TGMCMentor Award 2013.
- IBM Cloud Blue Mix Certified.
- Microsoft Azure Certification by Manipal University.
- Selected as Mentor in USERC, Uttarakhand. (DST Body of Uttarakhand)
- Best Teacher Award in B.Tech.

- Represented three states, Uttarakhand/West U.P / Himachal Pradesh, as a Science Communicator in the Indian Science Congress, Jammu, 3-7, Feb, 2014.
- Pioneer to implement an SMS-based information collection system during the Lok Sabha Election of Hardiwar in 2012.
- Launched "NamoGanga" a mobile app to keep Ganga clean according to the guidelines of Hon'ble PM Mission Namami Gangey.
- CMI Level-5 Certification (Under AICTE UKIERI Leadership Program (19-22,Nov,2018 ; 26,Feb- 1, March,2019 ; 19 June-22 June,2019)
- FDP "Quantum Technologies and Applications" 28 Feb- 22 March,2025. (MNIT Jaipur-Online)
- FDP "Foundations of Quantum Technologies" 11 April – 3 May,2025. (MNIT Jaipur-Online)
- FDP "Basics of Quantum Programming" 16 May – 7 June,2025. (MNIT Jaipur-Online)
- Certificate Program on "Generative AI Foundations" from upGrad in collaboration from Microsoft- 29 June,2025 (Online)