

Faculty Profile

Faculty Name	Prof. (Dr.) Poonam Panwar
Designation	Associate Dean (RIC) and Professor (DCA)
Qualification	M.Tech.(CSE) from GJUST, Hisar PhD from Thapar University, Patiala
Email	poonam.bca@piet.co.in
Area of Interest	Soft Computing, Agri-Informatics, Machine Learning, DevOps
Work Experience (Total)	
• Teaching	20+ years
• Research	20+ years
• Industry	6 Months
• Others	Nil
Courses taught at Diploma/ Post Diploma/ Under Graduate/ Post Graduate/ Post Graduate Diploma Level	Various courses of CSE and CA at UG and PG levels at RBU, MM(DU), Chitkara University, Hindu Institute of Management, Thapar University (Patiala) and Ambala College of Engineering and Applied Research (Ambala).
Membership of Professional Bodies	Soft Computing Research Society (SCRS), New Delhi, INDIA.
Research Publications	
• Research Papers UGC-CARE	15
• Research Papers SCOPUS	26
• Research Papers WoS/SCI/ABDC	06
• List of Publications	• “SkinDxPro: A Deep Learning Based Multi-Modal Technique to Improve the Diagnosis of Skin Cancer”, International Conference on Recent Advancements in Artificial Intelligence and Soft Computing - ICAISC-2025 (Scopus Indexed).

	• “A Multi-Modal Explainable Deep Learning Model for Rheumatoid Arthritis Diagnosis Using Multi-Omics and Clinical Data” 6th International Conference on Mobile Radio Communication & 5G Networks – 2025 (Scopus Indexed). • “An Analysis of Metaheuristic Approaches and Algorithms for the Cases of Failure and Maintenance Rates” COMPLEX SYSTEM MODELING AND SIMULATION (Scopus Indexed). • “A multi-step mathematical model-based predictive strategy for software release timing during testing stage”, Mathematical Modelling and Numerical Simulation with Applications, 4(3), 351-369. https://doi.org/10.53391/mmnsa.1406374 (Scopus Indexed) • “Mathematical modeling and Profit Analysis by using RPGT”, IEEE International Conference on Contemporary Computing and Communications (InC4). (Scopus Indexed) • “Stochastic Optimization and Reliability Analysis of Mushroom Plant”, Reliability: Theory & Applications, 19(1 (77)), pp.729-743, 2024. (Scopus Indexed) • “Reliability Optimization of a Degraded System Under Preventive Maintenance Using Genetic Algorithm”, Journal of Mechanics of Continua and Mathematical Sciences, Vol – 19 No -1, January 2024. (Scopus Indexed) • “AI based system for creating freezing protocols for cell cryopreservation”, Cryobiology, Volume 113, 2023: 104765. (SCI Indexed, Impact Factor: 2.7) • "Generic Edge Computing System for Optimization and Computation Offloading of Unmanned Aerial Vehicle", Computers and Electrical Engineering 109 (2023): 108779. (SCI Indexed, Impact Factor: 4.9) • "Self-Attention-Based Edge Computing Model for Synthesis Image to Text through Next-Generation AI Mechanism", Mathematical Problems in Engineering 2022 (2022). (SCI Indexed, Impact Factor:1.430) • "Energy-efficient resource allocation over wireless communication systems through deep reinforcement
--	---

	learning", International Journal of Communication Systems: e5589. (SCI Indexed, Impact Factor: 2.1) • "A Method for Predicting the Release Date of Software During Its Testing Stage", Accepted for publication in International Journal of Advanced Intelligence Paradigms, Inderscience, UK. (ISSN online: 1755-0394, ISSN print: 1755-0386). (Scopus Indexed). • "Load Balancing in Multiprocessor Systems Using Modified Real-Coded Genetic Algorithm", Advances in Intelligent Systems and Computing, vol 1424. Springer, Singapore. https://doi.org/10.1007/978-981-19-0475-2_18. (Scopus indexed). • "Forecasting the Budget Required for Software under Development", 2021 8th International Conference on Signal Processing and Integrated Networks (SPIN), Noida, India, 2021, pp. 36-40, doi: 10.1109/SPIN52536.2021.9566089. (Scopus indexed). • "A Brief Review on Clustering Based Medical Image Segmentation Algorithms with Issues and Challenges", 2021 9th International Conference on Reliability, Infocom Technologies and Optimization (Trends and Future Directions) (ICRITO), Noida, India, 2021, pp. 1-8, doi: 10.1109/ICRITO51393.2021.9596154. (Scopus indexed). • "Weighted Active Learning Paradigm based on GA and SVM for Pattern Classification", 2021 9th International Conference on Reliability, Infocom Technologies and Optimization (Trends and Future Directions) (ICRITO), Noida, India, 2021, pp. 1-6, doi: 10.1109/ICRITO51393.2021.9596505. (SCOPUS indexed). • "Comparative Analysis of Parameter Estimation Techniques used in Software Reliability Growth Models" International Journal of Advances in Electronics and Computer Science, Vol 6, Issue 7, pp 36-42, July 2019, (ISSN(p): 2394-2835). (UGC CARE) • "A Genetic Algorithm Based Scheduling Algorithm for Grid Computing Environments", Advances in Intelligent Systems and Computing, vol 436. Springer, Singapore. https://doi.org/10.1007/978-981-10-0448-3_13. (Scopus Indexed). • "Effect of Imperfect Debugging on Prediction of
--	--

	Remaining Faults in Software”, Advances in Intelligent Systems and Computing, vol 436. Springer, Singapore. https://doi.org/10.1007/978-981-10-0448-3_14. (Scopus Indexed). • “Predicting Total Number of Failures in a Software Using NHPP Software Reliability Growth Models”, Advances in Intelligent Systems and Computing, vol 259. Springer, New Delhi. https://doi.org/10.1007/978-81-322-1768-8_62. (Scopus Indexed) • “A Genetic Algorithm Based Technique for Efficient Scheduling of Tasks on Multiprocessor System”, Advances in Intelligent and Soft Computing, vol 131. Springer, New Delhi. https://doi.org/10.1007/978-81-322-0491-6_84. (Scopus Indexed). • "A review of multiprocessor directed acyclic graph (DAG) scheduling algorithms", International Journal of Computer Science & Communication 66, no. 11 (2015): 67-72. (UGC CARE) • "Study of Perfect and Imperfect Debugging NHPP SRGMs used for Prediction of Faults in a Software", International Journal of Computer Science & Communication 6, no. 1 (2015): 73-78. (UGC CARE) • "Optimization of multiprocessor scheduling using genetic algorithm", International Journal of Computer Applications 78, no. 4 (2013). (UGC CARE) • "Solving travelling salesman problem using genetic algorithm", International journal of advanced research in computer science and software engineering, 3, no. 6 (2013): 376-380. (UGC CARE) • "Analysis of reliability and cost tradeoffs in architecture-based software applications using a genetic algorithm", International Journal of Computer Applications 72, no. 1 (2013). (UGC CARE) • "Brief survey of soft computing techniques used for optimization of TSP", International Journal of Computer Science 2, no. 01 (2013). (UGC CARE) • "Genetic algorithms for image segmentation using active contours", Journal of Global Research in Computer Science 4, no. 1 (2013): 34-37. (UGC CARE)
--	--

	• "A Systematic Review of Software Reliability and Software Cost Models", International Journal of Advanced Research in Computer Science 4, no.1 (2013). (UGC CARE) • "Ranking of software reliability growth models using greedy approach", Global Journal of Business Management and Information Technology 1, no. 11 (2011). (UGC CARE) • "Optimum Software Reliability: A Literature Review", Global Journal of Business Management and Information Technology 1, no. 2 (2011): 125-129. (UGC CARE) • "Ranking of Software Reliability Growth Models using Greedy Approach", 5th IEEE International Conference on Advanced Computing & Communication Technologies [ICACCT-2011], November 5, 2011, organized by Asia Pacific Institute of Information Technology, Panipat, Haryana (ISBN: 81-87885-03-3). • "Optimum Software Reliability: A Literature Review" 5th IEEE International Conference on Advanced Computing & Communication Technologies [ICACCT-2011], November 5, 2011, organized by Asia Pacific Institute of Information Technology, Panipat, Haryana (ISBN: 81-87885-03-3). • "Prose: A Meaning based Search Engine" National Conference on Modern Developments in Engineering & Sciences (NCMDES 2009), February 27-28, 2009, organized by Ambala College of Engineering & Applied Research, Ambala, Haryana, India. • "Data Mining Tools & Techniques to Analyze Biological Data" National Conference on Bioinformatics Computing, February 19, 2006, organized by Chaudhary Devi Lal University, Sirsa, Haryana, India. • "Real Time Data Mining in Bioinformatics", AICTE sponsored National Seminar on Information and Communication Technology- Recent Advances & Applications (ICT-2006), February 09-11, 2006, organized by Seth Jai Parkash Mukand Lal Institute of Engineering & Technology, Radur, Yamuna Nagar, Haryana, India. • "Forecasting the Budget Required for Software Under Development" 8th International Conference on Signal
--	---

	Processing and Integrated Networks (SPIN-2021) held on 26-27 August, 2021 through Virtual Mode at Amity University, Noida, India. • “Load Balancing in Multiprocessor Systems Using Modified Real Coded Genetic Algorithm” Second International Conference on Innovations in Computational Intelligence and Computer Vision (ICICV-2021) held on Aug 05-06, 2021 at Manipal University Jaipur, Rajasthan, India. • “Comparative Analysis of Parameter Estimation Techniques used in Software Reliability Growth Models”. International conference on science, technology, engineering and management (ICSTEM) held on October 8-9, 2019 at Brisbane, Australia, 2019. • “Comparative Analysis of Parameter Estimation Techniques used in Software Reliability Growth Models”. International conference on science, technology, engineering and management (ICSTEM) held at June 20-21 at Vancouver, Canada, 2019. • “Predicting Total Number of Failures in a Software Using NHPP Software Reliability Growth Models.” Third International Conference on Soft Computing for Problem Solving (SocPros 2013) December 26-28, 2013, organized by Saharanpur Campus of Indian Institute of Technology Roorkee, Roorkee, India and Co-organized by Special Interest Group on System Assurance Engineering and Management and Special Interest Group on Environment Management Systems, Berkeley Initiative in Soft Computing (BISC), Department of Electrical Engineering and Computer Science, University of California, Berkeley, USA. • “A Genetic Algorithm Based Technique for Efficient Scheduling of Tasks on Multiprocessor System.” The International Conference on Soft Computing for Problem Solving (SocProS 2011), December 20-22, 2011, organized by The Institution of Engineers (India), Roorkee Local Centre, IIT Roorkee, Roorkee, Uttarakhand, India. • “Prose: A Meaning based Search Engine” National Conference on Modern Developments in Engineering & Sciences (NCMDES 2009), February 27-28, 2009, organized by Ambala College of Engineering & Applied
--	--

	Research, Ambala, Haryana, India. • “Data Mining Tools & Techniques to Analyze Biological Data” National Conference on Bioinformatics Computing, February 19, 2006, organized by Chaudhary Devi Lal University, Sirsa, Haryana, India. • “Real Time Data Mining in Bioinformatics”, AICTE sponsored National Seminar on Information and Communication Technology- Recent Advances & Applications (ICT-2006), February 09-11, 2006, organized by Seth Jai Parkash Mukand Lal Institute of Engineering & Technology, Radur, Yamuna Nagar, Haryana, India. • “AI Based System for Creating Freezing Protocols for Cell Cryopreservation” in CRYO2023 held at Minneapolis, USA on July 27th, 2023.
Book and Chapter Publications	
• Books Authored published by International Publishers	Poonam Panwar, Satish Kumar” Scheduling of Directed Acyclic Graphs (DAGs) on Multiprocessor Systems” LAP Lambert Academic Publishing ISBN: 978-613-5-83149-8, 2017.
• Books Authored published by National Publishers	-
• Publication of Chapter in Edited Books	• Digital Twin Technology: Transforming Crop Management in Smart Agriculture • Simplifying Stock Market Predictions Using Artificial Intelligence
• Editor of Book by International Publishers	Information Engineering and Applied Computing, Whioce Publishing, Singapore.
• Editor of Book by	-

National Publishers	
• Translation Work of Book	-
• List of Book and Chapter Publications	-
Patents	
• Published	59
• List of published patent(s)	• A CNN and machine vision equipped technique for spraying agrochemicals in orchard canopies • A heavy-duty, grip-equipped spade with a removable and protractible handle • A novel herbal composition for the treatment of different types of fever, cough and chest congestion • A smart water bottle for monitoring daily hydration goals using color-coded progress bars • A system of 3D technology buildings • A system of smart shopping with AR/VR technology • A system of smart travelling bag • Ai-driven robot to control grain pests in • Ai-powered approach to controlling grain pests in seed Godowns and granaries • An automated and cost-effective milk dispenser for the dairy sector • An automated and cost-effective milk dispenser for the dairy sector • An ergonomically designed pregnancy-friendly office desk with adjustable footrests • Antitheft voice-based driver assistance system and method thereof • Artificial intelligence based smart agriculture system using embedded IOT • Attendance in educational institutions • Automated agrochemical application and plant maintenance device • Automated pesticide and micronutrient sprayer for multilayer crops and orchards • Automated pesticide and micronutrient sprayer for multilayer crops and orchards

	• Automated robot for pest control • Automated spraying robot for real time weed and pest management in fields • Automated weed and pathogen control device • Automatic height adjustment table • Automatic secured gas-stove • Automatically controllable smart stroller • Bracelet • Crop seeder cum irrigator • Curd settler • Device for controlling insect pests and weeds on fallow land using induction waves • Foldable drainage catheter • Foldable toothbrush • Gas leakage detection and alert system • GPS enabled biometric system for marking student's • Granaries • Implementation of techniques towards security and privacy for edge ai in IOT/IOE-based digital marketing environments • IOT enabled jewellery box • Massage robot • Massage robot • Method for secured communication and scheduling transmission resource in vehicular network • Mobile cover with women safety features • Nanotechnology based automated solar powered weed and pest control robot • Pen with screwdriver for eyeglasses' repair • Pendant • Real-time accident recognition and emergency alert system for highways • Remote communication haptic feedback system for pet keepers and their animals • Rolling board and pin stand (set) for making chapati • Self moving smart chair • Smart telescoping toll barrier • Smart toy robot for speech perception problem • Solar powered and IOT based tire pressure monitoring and warning system • Solar powered automated spraying robot for real time weed and pest management in field and vegetable crops • Solar-powered led grow lights intended for cultivating dragon fruit plants
--	---

	• Spraying robot for orchard canopies • System and smart learning device for speech perception problem • Test tube with identification number • The cutting-edge smart pen for effortless note-taking • Toothbrush holder with cover • Trading robot for the investors • Wearable CO2 detector • Canadian Copyright on “Healthcare Management: Introducing with an IOT and Machine learning Approach” Registration number is 1187857. • Indian Copyright on “Optimization of Two-Unit Repairable System Through Fuzzy Linguistic Approach: Less Cost, More Profit” with dairy number 26577/2023-CO/L.
• Filed	7
• List of filed patent(s)	• Pen with screwdriver for eyeglasses' repair • Massage robot • Spraying robot for orchard canopies • Test tube with identification number • A smart water bottle for monitoring daily hydration goals using color-coded progress bars • Solar-powered led grow lights intended for cultivating dragon fruit plants • An automated and cost-effective milk dispenser for the dairy sector
PhD Guidance	
• Degree Awarded	3
• Thesis Submitted	6*
M.Tech. Guidance	
• Degree Awarded	7
• Thesis Submitted	-
Research Project	
• List of Research project	• “Development of Artificial Intelligence Based Monitoring System for Safe Grain Storage towards Food Security and sustainability” submitted to Rashtriya Krishi Vikas Yojna-Remunerative Approaches for Agriculture and Allied Sector Rejuvenation (RKVY-RAFTAAR) through Department of Agriculture & Farmers Welfare, Government of Haryana, Panchkula. • “Establishment of Nucleus Stock Development, Honey and

	Beehive products Processing Centre at Faculty of Agriculture, MM(DU), Mullana, Ambala” submitted to National Bee Board, Department of Agriculture & Farmers Welfare (DA & FW), Ministry of Agriculture and Farmers Welfare, GOI, New Delhi through Department of Horticulture, Government of Haryana, Panchkula.
Consultancy	
List of Consultancy	-
Awards & Honours	
List of Awards & Honours	Software Product Management Specialization, University of Alberta. Google IT Support Professional Certificate. Recipient of the 5 “Academic Excellence Award” at Ambala College of Engineering & Applied Research for achieving the best results in university examinations. Distinction in M.C.A. Topper in M.Tech. 3rd Semester at university level. Distinction in M.Tech. Dissertation on “Real-Time Data Mining in Bioinformatics.” Top Scorer in the Ph.D. entrance test (2010) at Thapar University. Recognized as a Bronze Level Partner Faculty by the Infosys Inspire Campus Connect Program.
Invited lectures / Resource Person/ paper presentation in Seminars/ Conferences/full paper in Conference	Session chair at 3rd International Conference on Communication and Intelligent Systems (ICCIS 2021) Organized by National Institute of Technology Delhi Technically Sponsored by Soft Computing Research Society DECEMBER 18-19, 2021. Acted as GUEST SPEAKER in seven days online training-cum-certificate Programme on Novel Agricultural Systems (NAS 2.0-2022) organized by Hindustan Agricultural

	Research Welfare Society, Agar (Registered under MSME, Gov.t of India, NITI Aayog and ISO 9001:2015), During 20" - 26" Nov.2022.
• International (Abroad)	• Visited Queensland, Australia from October 1-15, 2019 to present paper “Comparative Analysis of Parameter Estimation Techniques used in Software Reliability Growth Models” at international conference on science, technology, engineering and management (ICSTEM) held at Brisbane. • “Optimal Assignment of Tasks with Precedence and Communication Costs on Multiprocessor Systems” oral presentation during SocProS 2019 to be held at Liverpool Hope University, UK. • “AI Based System for Creating Freezing Protocols for Cell Cryopreservation” in CRYO2023 held at Minapolis, USA on July 27th, 2023.
• International (Within Country)	• “Forecasting the Budget Required for Software Under Development” 8th International Conference on Signal Processing and Integrated Networks (SPIN-2021) held on 26-27 August, 2021 through Virtual Mode at Amity University, Noida, India. • “Load Balancing in Multiprocessor Systems Using Modified Real Coded Genetic Algorithm” Second International Conference on Innovations in Computational Intelligence and Computer Vision (ICICV-2021) held on Aug 05-06, 2021 at Manipal University Jaipur, Rajasthan, India. • “Comparative Analysis of Parameter Estimation Techniques used in Software Reliability Growth Models”. International conference on science, technology, engineering and management (ICSTEM) held on October 8-9, 2019 at Brisbane, Australia, 2019. • “Comparative Analysis of Parameter Estimation Techniques used in Software Reliability Growth Models”. International

	conference on science, technology, engineering and management (ICSTEM) held at June 20-21 at Vancouver, Canada, 2019. • “Predicting Total Number of Failures in a Software Using NHPP Software Reliability Growth Models.” Third International Conference on Soft Computing for Problem Solving (SocPros 2013) December 26-28, 2013, organized by Saharanpur Campus of Indian Institute of Technology Roorkee, Roorkee, India and Co-organized by Special Interest Group on System Assurance Engineering and Management and Special Interest Group on Environment Management Systems, Berkeley Initiative in Soft Computing (BISC), Department of Electrical Engineering and Computer Science, University of California, Berkeley, USA. • “A Genetic Algorithm Based Technique for Efficient Scheduling of Tasks on Multiprocessor System.” The International Conference on Soft Computing for Problem Solving (SocProS 2011), December 20-22, 2011, organized by The Institution of Engineers (India), Roorkee Local Centre, IIT Roorkee, Roorkee, Uttarakhand, India.
• National	• “Prose: A Meaning based Search Engine” National Conference on Modern Developments in Engineering & Sciences (NCMDES 2009), February 27-28, 2009, organized by Ambala College of Engineering & Applied Research, Ambala, Haryana, India. • “Data Mining Tools & Techniques to Analyze Biological Data” National Conference on Bioinformatics Computing, February 19, 2006, organized by Chaudhary Devi Lal University, Sirsa, Haryana, India. • “Real Time Data Mining in Bioinformatics”, AICTE sponsored National Seminar on Information and Communication Technology- Recent Advances & Applications (ICT-2006), February 09-11, 2006, organized by Seth Jai Parkash Mukand Lal Institute of Engineering &

	Technology, Radur, Yamuna Nagar, Haryana, India.
List of published papers	As given Above
Organizing National Conference/ International Conference/ FDP/STTP	Organized International Conference “Smart Generation Computing and Communication Networks”, October 04-05, 2024, University School of Computing, Rayat Bahra University, Mohali, Punjab, India. Organized Industry Conclave 2024, at University School of Computing, Rayat Bahra University, Mohali, Punjab, India. Organized Workshop on Computational and Research Tools January 14-20 at Ambala College of Engineering & Applied Research, Ambala, Haryana, India. Organized Faculty Development Programme on Recent Trends in Engineering August 6-14, 2013 at Ambala College of Engineering & Applied Research, Ambala, Haryana, India. Organized National Conference on Modern Developments in Engineering & Sciences (NCMDES 2009), February 27-28, 2009, at Ambala College of Engineering & Applied Research, Ambala, Haryana, India.
List of Conference/FDP/STTP committee	“Introduction to Data Science” from CISCO. “Introduction to IoT and Digital Transformation” from CISCO. “Introduction to Cybersecurity” from CISCO. “Introduction to DevOps” from IBM. “Introduction to Packet Tracer” from CISCO. “Software Product Management Capstone” from University of Alberta. Udemy “Explainable AI (XAI) with Python”. “Reviews & Metrics for Software Improvements” from University of Alberta. “Agile Planning for Software Products” from University of Alberta. “Software Processes and Agile Practices” from University of Alberta. “Client Needs and Software Requirements” from University of Alberta. “Introduction to Software Product Management” from

	University of Alberta. • “Linux for Developers” from Linux Foundation. • “Mind Control: Managing your Mental Health During Covid-19” University of Toronto. • “Learning to Teach Online” from UNSW Sydney (The University of New South Wales). • “System Administration and IT Infrastructure Services” from Google. • “IT Security: Defense against the digital dark arts” from Google. • “Technical Support Fundamentals” from Google. • “The Bits and Bytes of Computer Networking” from Google. • “Operating Systems and You: Becoming a Power User” through Coursera from Google. • “Covid-19: What you Need to Know (CME Eligible)” through Coursera Google. • “Business Analysis & Process Management” an online non-credit project authorized by Coursera Project Network and offered through Coursera, September 2024. • “Organic Marketing: Facebook Groups for small Businesses” an online non-credit project authorized by Coursera Project Network and offered through Coursera, September 2024. • “Search Engine Optimization (SEO) with Squarespace” an online non-credit project authorized by Coursera Project Network and offered through Coursera, September 2024. • “Getting Started with Microsoft Excel” an online non-credit project authorized by Coursera Project Network and offered through Coursera, January 2024. • “Introduction to Basic Game Development using Scratch” an online non-credit course authorized by Coursera Project Network and offered through Coursera, October 2020. • “Using Google Forms for Student Success” an online non-credit course authorized by Coursera Project Network and offered through Coursera, October 2020. • “Build a Full Website using WordPress” an online non-credit course authorized by Coursera Project Network and offered through Coursera, October 2020. • “Project Management: Creating the WBS” an online non-credit course authorized by Coursera Project Network and offered through Coursera, October 2020. • “Create a Resume and Cover Letter with Google Docs” an online non-credit course authorized by Coursera Project
--	---

	Network and offered through Coursera, October 2020. • Attended five days Faculty Development Programme “Next Gen AI and Data Analytics: Strategies for the Future” organized by Department of Computer Engineering, Astana IT University, Astana, Kazakhstan, from 31/03/2024 to 04/04/2025 (One Week). • Participated in the Faculty Development Programme on “Empowering Educators Inspiring Change” Conducted by Rayat Bahra University From 23/09/2024 to 27/09/2023 (One Week). • Participated in the AICTE Recognized Faculty Development Programme on “Deep Learning” Conducted by Computer Science and Engineering Department From 11/09/2023 to 15/09/2023 (One Week) at Maharishi Markandeshwar Institute of Computer Technology and Business Management. • Participated in one week faculty development Programme on “Developing Healthy Work Culture” Conducted by Curriculum Development Centre Department from 13/03/2023 to 17/03/2023 (One Week) at M.M. Engineering College, Maharishi Markandeshwar (Deemed to be University), Mullana, Ambala, Haryana. • One week Faculty Development Program on “Cyber Security and Ethical Hacking” July 25-29, 2022 organized by Department of Computer Science & Engineering, Chandigarh University, Mohali, Punjab. • One week Faculty Development Program on “Emerging Domains in Internet of Things” March 21-25, 2022 organized by Department of Computer Science & Engineering, CUIET, Chitkara University, Punjab. • One week Faculty Development Program on “Collaboration on Open-Source Software with Source Code Management” February 07-11, 2022 organized by Department of Computer Science & Engineering, CUIET, Chitkara University, Punjab. • Faculty Development Program “5 ways to unlock the research grant” held on May 17-21, 2021 organized by the Department of Computer Science and Engineering, Chitkara University, Punjab in association with CURIN. • One week e-STTP on “Computational Intelligence & Its Applications” from October 19-23. 2020 Organized by Department of Electrical Engineering and Department of Management Studies, Government Engineering College, Ajmer, Rajasthan.
--	---

	• AICTE sponsored one-week short term training Program (Online) on “Decision Making using Data Analysis” organized by Jagan Institute of Management Studies, Sector-5, Rohini, Delhi from September 28 to October 3, 2020. • SCRS Lecture series on computing on soft computing “Nature Inspired Algorithms-I” June 12-16, 2020 organized by Soft Computing Research Society, India. • SCRS Lecture series on computing on soft computing “Fuzzy Systems towards Experimental Study” 30 May, 2020 to 1 June 2010 organized by Soft Computing Research Society, India. • Invited talk on “Nanocarbon Interconnects” delivered by Prof. Cary Y. Yang, Santa Clara University, USA organized by EPIC and Ambala College of Engineering and Applied Research, Ambala. • AICTE recognized short term course on “Innovation Approach to Skill Development and Employment Generation in India through ICT” July 24-28, 2017 organized by National Institute of Technical Teachers Training and Research, Chandigarh at Ambala College of Engineering and Applied Research, Ambala. • AICTE recognized short term course on “E-governance in Technical Institutions through ICT” July 27-31, 2015 organized by National Institute of Technical Teachers Training and Research, Chandigarh at Ambala College of Engineering and Applied Research, Ambala. • AICTE recognized short term course on “Faculty Development: Planning and Management” January 19-23, 2015 at National Institute of Technical Teachers Training and Research, Chandigarh. • DST sponsored short term course on “Nature Inspired Optimization Algorithms: Recent Trends Theory and Applications”, March 25-28, 2011 at The Institution of Engineers (India), Roorkee Local Centre, IITR Campus, Roorkee. • Faculty Development Program on “Recent Trends in Information Technology Education & Research” April 23-28, 2007, Indian Institute of Management Kozhikode, Kerala, India. • Participated in the One Day Workshop on “AI-enabled Secure Federated Deep Reinforcement Learning for Open RAN” held on 13th June, 2023. Organized by Computer Science and Engineering Department Thapar Institute of Engineering and Technology, Patiala, Punjab. • Three weeks online workshop on “Pattern Recognition”
--	---

	organized by Chitkara University, Punjab from June 14-July 2, 2021. • Online Workshop “Leverage the Best of Research Atmosphere at Chitkara University” organized by Chitkara University, Punjab from 27th April to 1st May, 2021. • One Week Workshop on “Women Innovation and IPR” from March 08-13, 2021, organized by IPR Cell, Jaypee University of Information Technology, Wagnaghat, Solan, H.P. india. • Participated in two days’ workshop on “Hands on Practice with Real Networking Devices” organized by Department of Computer Science and Engineering on 10-11 March 2022 at Chitkara University, Rajpura. • Completed Faculty Development Program on “Shaping Data Science Curriculum for 21st Century: Exploring the Potential of Big Data, Artificial Intelligence and Machine Learning on 31 January 2021. • Attended “Financial Awareness Program” conducted by Centre for investment Education and Learning on 24.02.2024. • Attended webinar “Patent Grant Requirement in India” on 30/08/22 organized by Department of Biotechnology, MM(DU) & IAMBSS. • Attended webinar “Recent Trends in Basic and Applied Science” on 22/10/22 organized by Department of Science Jagannath University, Bahadurgarh, Haryana (India). • Attended INDO-SPAIN WEBINAR on “Electrolyzed Water and its application in Agriculture” on 08/04/22 at FOA, MM(DU), Mullana. • Attended webinar on “Solar Energy Applications towards Entrepreneurship and Sustainability” on 11/11/22 at FOA, MM(DU), Mullana. • Attended Webinar on “Analysis and Classification of Breast Abnormalities using Ultrasound Images” of webinar series on “Recent trends in Contemporary India” organized by Department of Electronics and Communication Engineering, Jaypee University of Information Technology, Wagnaghat, Solan, HP, India, 24 October 2020. • Attended Webinar “Women Empowerment” by Dr. Aushima Thakur, Director Philips, Netherlands organized by Caste based Discrimination Committee, Jaypee University of Information Technology, Wagnaghat, Solan, HP, India, 17 October 2020.
--	---

	• Attended Webinar “Advanced Driver Assistance Systems (ADAS)” of webinar series on “Recent trends in Contemporary India” organized by Department of Electronics and Communication Engineering, Jaypee University of Information Technology, Wagnaghat, Solan, HP, India, 3 October 2020. • Attended Webinar “Telecom Technologies, their evolution and RF optimization of KPIs” of Webinar Series on “Recent Trends in Contemporary India” organized by Electronics & Communication Engineering Department, Jaypee University of Information Technology, Wagnaghat, Solan, HP, India on 19th September 2020. • Attended Webinar “Communication the human connection” with Dr. Poonam Kumar Ahuja (Insightful talker, TV and Radio Performer, YouTube content creator (Inner Net) organized by Department of IT, Institute of Management studies, Noida, 9 July, 2020. • Online Webinar on “A systematic statistical approach for optimal solutions of industrial problems” organized by Department of Mathematics Koneru Lakashmaiah Education Foundation on 5th June, 2020. • Attended Seminar on “IBM Technologies” April 25, 2009 at ACE, Ambala, organized by ALLSOFT SOLUTIONS. • Attended Financial Awareness Program conducted by Centre for investment education and learning on 24.02.2023. • AICTE Training and Learning (ATAL) Academy Online Elementary FDP on "Bio-Inspired Computing for Data Analytics" February 08-12, 2022 at Lakireddy Bali Reddy College of Engineering (Autonomous). • AICTE Training and Learning (ATAL) Academy Online Elementary FDP on "Advances in Artificial Intelligence" January 21-25, 2022 at Siksha 'O' Anusandhan (Deemed to be University). • AICTE Training and Learning (ATAL) Academy Online Elementary FDP on "Application of Computers in Biology" from 2021-06-07 to 2021-06-11 at Galgotias University.
Social Contributions and Sports	
• List of Social Contributions	• Acted as reviewer for 3rd International Conference on Communication, Security, and Artificial Intelligence (ICCSAI – 2025), organized by Galgotias University, Greater Noida, India (NCR New Delhi), 4th - 6th April,

and Sports	2025. • Acted as reviewer for “2nd International Conference on Computational Intelligence & Communication Technology & Networking (CICTN-2025)”, Organized by Department of Computer Science and Engineering, ABES Engineering College, Ghaziabad, India, 6th -7th February, 2025 • Acted as reviewer for “IEEE Journal of Biomedical and Health Informatics” in 2023. • Acted as reviewer for “5th IEEE International Conference on Computing, Power and Communication Technologies (IC2PCT)” in IC2PCT-2024 organized by Galgotias University, Greater Noida, Uttar Pradesh, India on 9th & 10th February, 2024. • Acted as reviewer for “International Journal of Vehicle Information and Communication Systems, Inderscience” in 2023. • Acted as reviewer for “ISA transactions” a journal of Elsevier in August 2022. • Acted as reviewer for international conference on Communication, Security and Artificial Intelligence ICCSAI-2022 technically co-sponsored by IEEE UP Section held on 23-24 December 2022 organized by Galgotias University, Greater Noida, Uttar Pradesh, India. • Developed E-Content • Participated in the “Dart Board Competition” held on 18th September 2021 organized by Chitkara University Sports Board. • Participated in the “Dart Board Competition” held on 5th February 2022 organized by Chitkara University Sports Board.
------------	---