

Dr. Jyoti Gajrani

(AICTE Visvesvaraya Best Teacher Award 2021)

Institute	Govt. Engg. College, Ajmer www.ecajmer.ac.in	Designation	Assistant Professor & HoD, CSE
Address (Home)	620, Pragati Nagar Kotra, Ajmer	Phone	9460031242
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Google Scholar Profile

Education

- 2015-2020** PhD (Computer Engineering) - Malaviya National Institute of Technology, Jaipur
Course Work - 9.5 (CPI)
Thesis Title - "Integrated Static and Dynamic Analysis Techniques for Improved Analysis of Android Apps"
Research Advisor: Dr. Meenakshi Tripathi & Prof. Manoj Singh Gaur
- 2011-2013** M.Tech.(Computer Engineering) - Indian Institute of Technology Bombay
CPI: 8.94
Thesis Title: *Implementation of Side Channel Attacks on AES in Modern Processors*
Research Advisor: Prof. Bernard L. Menezes
- 2000-2004** B.Tech.(Computer Engineering) - Mody University, Lakshmangarh
Percentage 79.8%
Project Advisor: Mr. Prabhat Shandelya

Subjects Taught

Graduate: Databases, Computer Architecture, System Software, C/C++ Programming, Operating System, Information Security, Linux-Shell Programming
Post Graduate: Advance Databases, Research Methodology, Deep Learning, System Security, Research and Publication Ethics (also at PhD level)

Research Interests

Cyber Security, Malware Analysis, Machine Learning, Deep Learning, Artificial Intelligence, Operating Systems, BigData

PhD Guidance

- Vishnu Prakash Sharma, Asst. Professor, GECA (Ongoing)
- Monalisa Meena, Asst. Professor, GWECA (Ongoing)

PG (M.Tech.) Guidance

- Swatantra Porwal, "Extension of PMIPv6 Model for NEMO-Smart in VANET", **Completed**
- Bhawana Mewara, "A Robust Client Side Defense for Reflected Cross-Site Scripting", **Completed**
- Sheetal Bairwa, "Detection and Robust Solution against Phishing Attacks", **Completed**

- Mohit Sharma (Student of MANIT, Bhopal), “Smartphone Malware Analysis through Text Mining ”, **Completed (Co-Guide)**
- Bhawana Sharma, “Performance Measurement Of RPL Protocol Using Modified MRHOF in IOT Network”, **Completed**
- Kapil Kumar, “Cloud attack classification using supervised machine learning and deep neural network”, **Completed December 2021**
- Sakshi Jain, “Android malware analysis using machine learning classifiers”, **Completed November 2021**
- Kuldeep Singh, “Cardiac Arrhythmia detection and classification using deep learning Convolution Neural Network Architecture”, **Completed June 2022**
- Rajat Shri Shrimal, “Web Security”, Ongoing Since Feb 2022

Expert Lectures Delivered

- Expert Lecture on Malware Analysis in 3 days workshop on Nutshells of Cyber Security from 4th April 2023 – 6th April 2023, organized by Department of CSE, Engineering College Ajmer
- Expert lecture on “Fingerprinting Android Malware using Dynamic Analysis” in Science & Engineering Research Board (SERB) ACCELERATE VIGYAN SCHEME Sponsored High End Workshop On Machine Learning For Cyber Security From 18-01-2023 to 24-01-2023 by IIIT Trichy, TamilNadu
- 4 Expert lecture sessions in SERB sponsored Karyashala (High-end Workshop) under Accelerate Vigyan (AV) scheme on the topic “Open Source Scientific Document Preparatory Tools (Latex, Gnuplot)” during December 12 - 18, 2022 Organized by Indian Institute of Information Technology Kota
- “Digital Forensics with Case Studies”, in 1 week online AICTE-GTU sponsored FDP on “Recent Trends and Future Directions in Information Security”, organized by L D College of Engineering, Ahmedabad on March 24, 2022.
- “Android Security: Threats, Attacks, and Defences” in two week International Winter School on Cyber Security and Threat Intelligence organized by Cyber Intelligence Research Laboratory, Department of Computer Applications, Cochin University of Science and Technology (CUSAT), from 17/01/2022 to 28/01/2022.
- “Dynamic Analysis of Android Apps” in 2 week training program entitled “Deep Dive into Mobile Application Security Analysis” dated 30th Dec 2021, organized by CDAC Hyderabad between 22nd November - 1st December 2021.
- “Digital Forensics and Case Studies” in five days short term training program entitled “Cyber Security meets Artificial Intelligence” organized jointly by IEEE Computational Intelligence Society, Department of Electrical Engineering, School of Technology, Pandit Deendayal Energy University and A. V. Parekh Technical Institute, Gujarat between 25th October to 29th October, 2021.
- “Cyber Crime: Investigators and Attackers Perspective” in AICTE-ISTE sponsored FDP titled “Digital forensics and Cybercrime” during 24th May 2021 to 29th May 2021 by Center for Cryptography, Cyber Security & Digital forensics(C3-SDF), Department of Computer Science & Engineering, LNMIIT, Jaipur, Rajasthan
- “Exploitation-Prone Vulnerabilities and their Detection in Android” in AICTE-ISTE Online Mode Refresher Program at AVPTI Rajkot during 28th April - 4th May 2021 entitled “Security and Privacy: Trends and Directions” on April 28, 2021.
- “Hiding Privacy Leaks through Reflection in Android Apps” in AICTE-ISTE Online Mode Refresher Program at AVPTI Rajkot during December 14-19, 2020 entitled “Mobile Security, Cloud Computing Security Challenges: Trends and Future Directions” on December 19, 2020.
- “Android Security” at Cochin University of Science and Technology in International Online Workshop on Information and Network Security Challenges and Solutions using Artificial Intelligence Approaches during December 14-18, 2020 on December 17, 2020

- “Android Security” at MNIT Jaipur in 1 week AICTE ACADEMY sponsored National Workshop on Cyber Security on December 21, 2019
- “Android Security” at IIT Jammu in 2 week workshop for M.Tech. students on December 9, 2019
- “Latex: An advance Technical Writing Tool” at MNIT Jaipur in TEQIP Sponsored workshop on “Technical Writing with Advanced Computer Tools: Hands-on Training” on May 16, 2019
- “Reflection Aware ICC Analysis Framework for Android Apps” at MNIT Jaipur during GIAN course on “Principles and Practice of Software Protection” at MNIT Jaipur from December 12-18, 2017
- “Understanding Android Security” at Manipal University, Jaipur in SIN 2017 conference
- “Android App Development” at IIT Jammu on Sep 19-20th, 2017
- “Importance and Utility of English Language in field of Computers” at Dayanand College, Ajmer
- “Importance and Utility of English Language in the Field of Computer” at DAV College, Ajmer on September 9, 2017
- “Computer Fundamentals” at Mahirshi Dayanand Sarawati University, Ajmer for PhD students on April 28, 2017
- “Android Malware Analysis” at Govt. Engineering College, Ajmer in 2 week FDP RTTICC-2016.
- “Cyber Security and SmartPhone Security” at Shri Govindsingh Gurjar Govt. College, Nasirabaad on August 13, 2016.

Journal Publications

- Rati Bhan, Rajendra Pamula, Parvez Faruki, Jyoti Gajrani. “Blockchain-Enabled Secure and Efficient Data Sharing Scheme for Trust Management in Healthcare Smartphone Network” Journal of Supercomputing, 0920-8542 (print); 1573-0484 (web), SCI, SCIE, IF: 2.557
URL: <https://link.springer.com/article/10.1007/s11227-023-05272-6>
- Kuldeep Chouhan, Jyoti Gajrani, Bhavna Sharma, Satya Tazi, “Arrhythmia Classification using Deep Learning Architecture” Chapter published in Real-Time Applications of Machine Learning in Cyber-Physical Systems, IGI Global, Indexing: Scopus & Web of Science. Nov 2021
<https://www.igi-global.com/book/handbook-research-real-time-applications/277234>
DOI: 10.4018/978-1-7998-9308-0
- Madan Singh, Chandni Maggo, Kapil Raj Pokhra, Sanwara Ram, Giriraj Nagar, Jyoti Gajrani, Vinesh Jain, “Cloud Attack classification using Supervised Machine Learning and Deep Neural Network”. Design Engineering (Toronto), ISSN:0011-9342, Indexing: Scopus Index- Q4, Ei Compindex, Nov 2021
URL: <http://www.thedesignengineering.com/index.php/DE/article/view/7376>
- Choudhary Anmol, Singh Kuldeep, Gajrani Jyoti, and Sharma Bhavna. “Deep Learning with PyTorch.” Chapter published in Machine Learning and Deep Learning in Real-Time Applications. IGI Global, Indexing: Scopus & Web of Science.
URL: <https://www.igi-global.com/chapter/deep-learning-with-pytorch/257314>
DOI: 10.4018/978-1-7998-3095-5.ch003
ISBN13: 9781799830955|ISBN10: 1799830950|EISBN13: 9781799830979
- Jyoti Gajrani, Vijay Laxmi, Meenakshi Tripathi, Manoj Singh Gaur, Akka Zemmari, Mohamed Mosbah and Mauro Conti. “Effectiveness of State-of-the-art Dynamic Analysis Techniques in Identifying Diverse Android Malware and Future Enhancements”, Chapter in Advances in Computers (Book Series), ScienceDirect., Volume 119, ISSN: 0065-2458
URL: <https://www.sciencedirect.com/science/article/pii/S0065245820300413>
- Jyoti Gajrani, Umang Agarwal, Vijay Laxmi, Bruhadeshwar Bezawada, Manoj Singh Gaur, Meenakshi Tripathi, and Akka Zemmari. “EspyDroid+: Precise Reflection Analysis of Android Apps.” Computers & Security (2019): 101688, ISSN: 0167-4048, <https://doi.org/10.1016/j.cose.2019.101688>, SCIE, IF: 3.062
URL: <https://www.sciencedirect.com/science/article/pii/S0167404819302251>

- Jyoti Gajrani, Meenakshi Tripathi, Vijay Laxmi, Gaurav Somani, Akka Zemmari, and Manoj Singh Gaur. "Vulvet: Vetting of Vulnerabilities in Android Apps to Thwart Exploitation." ACM DTRAP (Digital Threats: Research and Practice, January 2020, <https://doi.org/10.1145/3376121>
URL: <https://dl.acm.org/doi/abs/10.1145/3376121>
- Tripathi, Meenakshi, Jyoti Gajrani, and Vinesh Kumar Jain. "Mobile Security: Attacks and Prevention-Security in Mobile Communication." in Routing Protocols and Architectural Solutions for Optimal Wireless Networks and Security. IGI Global, 2017, ISBN13: 9781522523420| ISBN10: 1522523421| EISBN13:, Indexing: Scopus & Web of Science. 9781522523437| DOI: 10.4018/978-1-5225-2342-0. Pages 43-59. <https://www.igi-global.com/chapter/mobile-security/181166>
- "Augmentation of the Classification Performance of Least Square support vector machine using Simple Particle Swarm Optimization for Phishing Dataset", Sheetal Bairwa, Jyoti Gajrani, Satyanarayan Tazi in "IJETMAS Special Issue" Nov 2015, ISSN 2349-4476
<http://ijetmas.com/admin/resources/project/paper/f201512011448955248.pdf>
- "An Improved Feature Vector storage metric for fast Android Malware Detection Framework", Mohit Sharma, Meenu Chawla, Vinesh Jain, Jyoti Gajrani in "IOSR Journal of Computer Engineering (IOSR-JCE), eISSN: 2278-0661, Volume-17, Issue-4", July-Aug 2015 <http://www.iosrjournals.org/iosr-jce/papers/Vol17-issue4/Version-4/H017445260.pdf>
DOI: 10.9790/0661-17445260
- "Enhancement of Salt and Pepper Noise Image using Sharpness Indexed Filtering", Santosh Kumar Singh, Vinesh Jain, Rakesh Rath, Jyoti Gajrani in "International Journal of Engineering and Technical Research (IJETR), ISSN: 2321-0869, Volume-3, Issue-5", May 2015
https://www.erpublication.org/published_paper/IJETR032307.pdf
- "Vulnerability Scanners : A Proactive Approach to assess web application security ", Sheetal Bairwa, Bhawna Mewara and Jyoti Gajrani in "IJCSA , Volume 4, No.1, ISSN 2200-0011, DOI:10.5121/ijcsa.2014.4111" , Feb-2014
<https://wireilla.com/papers/ijcsa/V4N1/4114ijcsa11.pdf>
- "Analysis of Searching Techniques and Design of Improved Search Algorithm for Unstructured Peer-to-Peer Networks", Yash Pal Singh, Rakesh Rath, Jyoti Gajrani, Vinesh Jain, in "IJCNIS , Volume 2, No.4, ISSN 2076-2739" , April-2010 <https://www.scribd.com/document/43493199/100404#>
- "Two Level TTL for Unstructured P2P Network using Adaptive Probabilistic Search", Yash Pal Singh, Rakesh Rath, Jyoti Gajrani, Vinesh Jain, in "IJSER, Volume 3, Issue 1 ISSN 2229-5518, January 2012"
<https://www.ijser.org/researchpaper/Two-Levels-TTL-for-Unstructured-P2P-Network-using-Adaptive-pdf>
- "Semi Structured Data", Hari Prabhat Gupta, Rakesh Rath, Jyoti Tilokchandani, Prakriti Trivedi, in "41st Annual National Convent" Organised By: CSI-2006, in 2006.
- "An Adaptive Method of Content Extraction with the Application of Image Segmentation Using Dynamic Threshold", V Mehra, V Jain, J Gajrani IJIRCCE, Vol. 5, Issue 3, March 2017, DOI: 10.15680/IJIRCCE.2017. 0503216.
<http://ijircce.com/admin/main/storage/app/pdf/OSA0frqssFAuYZHTZEVsDCv3GBnwTs8gmSJouQsX.pdf>

Conference/ Workshop Publications

- Narender Kumar, Vinesh Kumar Jain and Jyoti Gajrani, K-Means Algorithm to form Dynamic Cluster Formation to Counter the Static Property of K-Means, 3rd International Conference on Data Science and Applications (ICDSA March 2022). Scopus Indexed, Lecture Notes in Networks and Systems book series https://link.springer.com/chapter/10.1007/978-981-19-6634-7_32
- Sunil Kumar, Jyoti Gajrani, and Meenakshi Tripathi, "Fuzzing REST APIs for Bugs: An Empirical Analysis", 10th International Conference on FRONTIERS OF INTELLIGENT COMPUTING: THEORY AND APPLICATIONS (FICTA 18-19, June 2022),
https://link.springer.com/chapter/10.1007/978-981-19-7513-4_28

- Sakshi Jain, Tarul Khandelwal, Yash Jain, Jyoti Gajrani (March 2021) Android Malware Analysis Using Machine Learning Classifiers. In Proceedings of International Conference on Computational Intelligence and Emerging Power System. Algorithms for Intelligent Systems. Springer, Singapore.
https://doi.org/10.1007/978-981-16-4103-9_15
- Vinesh Jain and Jyoti Gajrani, "IoT Security: A Survey of Issues, Attacks and Defences", in world conference on "Congress on Intelligent Systems (CIS 2020)", published in Springer **Advances in Intelligent Systems and Computing** series
https://link.springer.com/chapter/10.1007/978-981-33-4582-9_18
- Bhawana Sharma, Jyoti Gajrani and Vinesh Jain, "PERFORMANCE MEASUREMENT OF RPL PROTOCOL USING MODIFIED MRHOF IN IOT NETWORK" in International Conference on Deep Learning, Artificial Intelligence and Robotics, (ICDLAIR) 2019, December 07-08, 2019 at MNIT Jaipur
https://link.springer.com/chapter/10.1007/978-3-030-67187-7_25 DOI:https://doi.org/10.1007/978-3-030-67187-7_25
Print ISBN: 978-3-030-67186-0
- "Unraveling Reflection Induced Sensitive Leaks in Android Apps", Jyoti Gajrani, Vijay Laxmi, Meenakshi Tripathi, M.S. Gaur, Daya Ram Sharma, Akka Zemmari, Mohamed Mosbah, and Mauro Conti in "Springer LNCS 12th International Conference on Risks and Security of Internet and Systems, (CRISIS 2017)" at 19st - 21st September 2017, Dinard, France.
- "Poster: Detection of Information Leaks via Reflection in Android Apps", Jyoti Gajrani, Li Li, Vijay Laxmi, Meenakshi Tripathi, M.S. Gaur, Mauro Conti in "ACM Asia Conference on Computer and Communications Security (ASIACCS) 2017" at April 2-6, Abu Dhabi, UAE.
- "sPECTRA: A Precise FramEwork for Analyzing CrypTographic VulneRabilities in Android Apps", Jyoti Gajrani, Meenakshi Tripathi, Vijay Laxmi, M.S. Gaur, Mauro Conti, Muttukrishnan Rajarajan in "The 14th Annual IEEE Consumer Communications & Networking Conference" at 8-11 January 2017, Las Vegas, USA.
- "A Robust Dynamic Analysis System Preventing SandBox Detection by Android Malware", Jyoti Gajrani, Jitendra Sarswat, Meenakshi Tripathi, Vijay Laxmi, M.S. Gaur, Mauro Conti in "8th International Conference on Security of Information and Networks (SIN-2015)" at Sochi, Russia
- "A Survey of Android Malware Detection Strategy and Techniques", Mohit Sharma, Meenu Chawla, Jyoti Gajrani in "International Conference on ICT for Sustainable Development in concurrent with ICT Awards The EXCELLENCIA (ICT4SD-2015)" at Ahmedabad(3-4 July 2015), India
- Bairwa, Sheetal, Jyoti Gajrani, and Satyanarayan Tazi. "Enhancement of the Classification Performance of Least Square Support Vector Machine using Simple Particle Swarm Optimization for Phishing Dataset." Proceedings of the Second International Conference on Information and Communication Technology for Competitive Strategies. ACM, 2016.
ISBN: 978-1-4503-3962-9
<https://doi.org/10.1145/2905055.2905064>
- "Enhanced Browser Defense for Reflected Cross-Site Scripting", Bhawna Mewara, Sheetal Bairwa, Jyoti Gajrani, Vinesh Jain in "IEEE 3rd International Conference on Reliability, Infocom Technologies and Optimization (ICRITO 2014) " at Amity University, Noida (8-10 Oct 2014)
DOI: 10.1109/ICRITO.2014.7014761
<https://ieeexplore.ieee.org/document/7014761>
- "Browser's Defenses Against Reflected Cross-Site Scripting Attacks", Bhawna Mewara, Sheetal Bairwa, Jyoti Gajrani in "IEEE International Conference on Signal Propagation and Computer Technology (IC-SPCT 2014) " at GECA, Ajmer (12-13 July 2014),
DOI: 10.1109/ICSPCT.2014.6884966
<https://ieeexplore.ieee.org/document/6884928>
- "Challenges in Implementing Cache-Based Side Channel Attacks on Modern Processors", Jyoti Gajrani, Pooja Mazumdar, Sampreet Sharma, Bernard Menezes in "IEEE VLSI Design Conference 2014" at IIT Bombay, DOI: 10.1109/VLSID.2014.45

- “Scalable Parallel Pohlig Hellman Algorithm for Solving Discrete Logarithm Problem”, Dinesh Patil, Jyoti Gajrani in “IEEE 20th International Conference on High Performance Computing (HiPC 2013)” at Bangalore, India
- “Probabilistic method for energy efficiency routing with node compromised resistance”, Singh, D.; Sharma, S.; Jain, V.; Gajrani, J. in “IEEE International Conference on Communications and Signal Processing (ICCSP)” at Melmaruvathur, India (3-5 April 2014), DOI: 10.1109/ICCSP.2014.6949950
- “Energy efficient source based tree routing with time stamp in WSN”, Singh, D.; Sharma, S.; Jain, V.; Gajrani, J. in “IEEE International Conference on Signal Propagation and Computer Technology (ICSPCT 2014)” at GECA, Ajmer (12-13 July 2014), DOI: 10.1109/ICSPCT.2014.6884966
- “Expert System in Real World Organisation”, Anita Choudhary, Rakesh Rath, Jyoti Gajrani, Vinesh Jain, in “Role of Computers and Electronics in Power System” Organised at JECRC, Jaipur, July 13-15, 2007
- “Link Layer Wireless LAN Security: Challenges and Solution”, Rakesh Rath, Jyoti Gajrani, Vinesh Jain, in “Emerging Trends in Electronics and Telecommunication: Vision 2020” Organized by JIET, Jodhpur, March 7-8, 2008
- “Wireless communication: Voice and Data Security” in “Recent Advancement in Engineering and Technology”, Megha Singh, Jyoti Tilokchandani, Shruti Ojha at Govt. Engineering College, Ajmer, April 2008
- “Time Dependent Thermal Radiant Exposure Estimate Analysis in Nuclear Explosion”, D.K. Tripathi, Nisheet Saxena, Jyoti Tilokchandani, G. L. Baheti in “Workshop of nuclear Explosion” Organized by Defence Lab, Jodhpur, Jan 2006
- Porwal, Swatantra, Jyoti Gajrani, and Vinesh Jain. “Extending the existing PMIPv6 model for nemo smart.” 2017 International Conference on Energy, Communication, Data Analytics and Soft Computing (ICECDS). IEEE, 2017.
- Singh, D., Sharma, S., Jain, V., & Gajrani, J. (2014, April). Probabilistic method for energy efficiency routing with node compromised resistance. In 2014 International Conference on Communication and Signal Processing (pp. 783-787). IEEE.

Books/Chapter Publications

- Editor of Proceedings of International Conference on Computational Intelligence and Emerging Power System ICCIPS 2021
URL: <https://link.springer.com/book/10.1007/978-981-16-4103-9>
- “Telecommunications Engineering and Fundamentals”, Dr. S. C. Jain, Vinesh Jain, Jyoti Tilokchandani, Rakesh Rath, Published By: RBD Publications, 2008
- Chapter कैशलेस योजना : एक अनूठी पहल, विनेश कुमार जैन, ज्योति गजरानी in Book titled साइबर सुरक्षा और वैज्ञानिक दृष्टिकोण, Published by Vagyanik Drishtikon Society (VDS), February, 2019

Recognition & Certifications

- Development of MOOC Course on “Cyber Security and Digital Forensics” for eLDA-LAB, IIIT Kota sponsored by H.G. Infra Engineering Limited (HGIEL) and Department of College Education, Rajasthan.
Course Link - <https://eldalab.in/courses/cyber-security-and-digital-forensics/>
- “Appreciation by Principal being Head of Department during successful grant of NBA to Computer Engineering Program for period year 2020-2023
- Member of Board of Studies, Bikaner Technical University, Bikaner Since 10/08/2021
- AICTE Visvesvaraya Best Teacher Award 2021
- Development of E-Lecture App for Technical Education department, GoR
- Swayam Certification with Elite+Silver for “Programming in C++” course Sep-Nov 2020

- Swayam Certification with Topper (5%) Elite+Silver for “Database Management System” course Sep-Nov 2020
- Swayam Certification with Elite for “Introduction to Operating System” course July-Sep 2019
- Reviewer of SN Computer Science, IETE Journal of Research, Taylor and Francis
- Reviewer of ICISSI 2022, NCITSA 2021, ICCCT2021, ICCIS 2020, ICDLAIR2019, INDICON 2019, SIN 2017, SIN 2018
- Recognition by Dr. Nitin Deep Blaggan, SP Ajmer for development of Ajmer Police Traffic App
- Representation of College for student projects at Festival of Education - 2017 organized by Govt. of Rajasthan at Jaipur
- Mentor of 5 teams selected for Remote Internship by TCS (April-2016 to July-2016).
- **GATE Qualified** in 2005 and 2011
- “**Amrita InCTF 2011** (National Level Ethical Contest)” Organised By AMRITA Vishva Vidhyapeeth, as a “Instructor of Student’s Team Participated in Contest”, 2011
- “The Great Mind Challenge(National Level Software Development)-**TGMC2006**” Organised By IBM Academic Initiative as a “Mentor of Student’s team participated in contest”, 2006

Conference/Seminar/Short Term Training Organized

- 4 days workshop on “Essentials of placement” in collaboration with TCS from 22 June 2023-26 June 2023
- 3 days workshop on Nutshells of Cyber Security from 4th April 2023 – 6th April 2023, Department of CSE, Engineering College Ajmer
- Local Coordinator of STC on ” Cryptography for Information Security” from 09-13 May, 2022 organized by NITTTR Chandigarh
- Convener of Industry Academia Conclave 2022 organized jointly by Department of CSE and Department of EE, Engineering College Ajmer on March 11, 2022
- Convener of **Rajasthan Science Literature Festival** organized by Engineering College Ajmer in association with Department of Science and Technology, Rajasthan during 9-10 Feb 2022.
- Coordinator of 3 days Orientation Training Workshop on “Daily Science News and Features for Digital and Print Versions of Vaigyanik Drishtikon for Promoting Science Literacy”, 28 - 30 September, 2021 organized by Department of CSE and Industry Innovation Cell, Engineering College Ajmer, Sponsored by NCSTC, DST, GoI
- Convener of 3 days workshop on ”Environmental Awareness and Climate Change”, July 28-30th, 2021 organized by Engineering College Ajmer
- General Chair and Editor of International Conference on Computational Intelligence and Emerging Power System, Springer (AIS), March 9-10, 2021 organized by Engineering College Ajmer.
- Convener of National Level Online Hackathon Codethon’21 under TEQIP-III, Feb 17-18, 2021 organized by Department of CSE, Engineering College Ajmer.
- TPC member of 2nd International Conference on Communication and Intelligent Systems (ICCIS 2020) Jointly Organized by BIRLA INSTITUTE OF APPLIED SCIENCES, UTTARAKHAND AND SOFT COMPUTING RESEARCH SOCIETY from DECEMBER 26-27, 2020.
- 1 week Short term Course on “Recent Advancement in Optical & Wireless Communication Techniques”, organized by Department of ECE, sponsored by TEQIP-III from October 19th to 23th, 2020 at Engineering College Ajmer as organizing committee Member.

- 1 week Short term Course on “Future Perspective of Electrical Power System” sponsored by TEQIP-III, organized by Department of Electrical Engineering from October 9th to 13th, 2020 at Engineering College Ajmer as Coordinator.
- 1 week Short term Course on “ICT in Research, Teaching and Learning” sponsored by TEQIP-III from September 7th to 11th, 2020 at Engineering College Ajmer as Coordinator.
- Coordinator in 1 day webinar on “Challenges in Good Learning and Assessment - Post COVID” held on Aug 8th 2020 by Prof. N C Shivprakash, Engineering College Ajmer
- Coordinator in 1 day webinar on “Women at Workplace: The Act of 2013” under Technical Education Quality Improvement Program (TEQIP-III) organized by Women Cell, Engineering College, Ajmer on 8 July, 2020.
- 1 week Short term Course on “Smart Grid Technologies & It's Applications” sponsored by TEQIP-III from Dec 17th to 21st, 2019 at Engineering College Ajmer as Member of Organizing Committee.
- 1 week Short term Course on “Deep Learning: An Emerging Technology” sponsored by TEQIP-III from Dec 17th to 21st, 2019 at Engineering College Ajmer as Coordinator.
- 1 week Short term Course on “Entrepreneurship and Personality Development” sponsored by TEQIP-III on Nov 04- Nov 08, 2019 at Govt. Engineering College Ajmer as Member of Organizing Committee.
- 2 week Short term Course on “Emerging Trends and Innovation in Engineering & Science” sponsored by TEQIP-III on July 22- Aug 02, 2019 at Govt. Engineering College Ajmer as Coordinator.
- International Conference on “Communication Systems and Network Technologies (CSNT2020)” organized by IEEE MP Sub Section and MIR Labs, Gwalior, with the support of IEEE Bombay Section at Gwalior as a TPC Member, October 13-15, 2017
- 1 week Short term Course on “Renewable Energy Systems and Their Techno-Economic Feasibility in India” sponsored by TEQIP-III on July 08-12, 2019 at Govt. Engineering College Ajmer as member of organizing committee.
- 5 Day FDP on “Robotics & AI” from June 24-28, 2019 at Govt. Engineering College Ajmer (Remote Center) under Electronics & ICT Academy, MNIT Jaipur as Local Coordinator.
- 2 Day workshop on Research Projects, funding, and Opportunities in Engineering & Sciences sponsored by TEQIP-III on May 29-30, 2019 at Govt. Engineering College Ajmer as member of organizing committee.
- 5 Day FDP on Network Security from May 20-24, 2019 at Govt. Engineering College Ajmer (Remote Center) under Electronics & ICT Academy, MNIT Jaipur as Local Coordinator.
- 2 day Python Workshop by Zeetron Networks Pvt. Ltd. at GECA from 14 Sep 2018- 15 Sep 2018
- International Conference on “Security Of Information And Networks (SIN 2018)” at Cardiff University, Cardiff as a Program Committee Member, September 10-12, 2018
- 5 Day FDP on ANN & Deep Learning from June 11-15, 2018 at Govt. Engineering College Ajmer (Remote Center) under Electronics & ICT Academy, MNIT Jaipur as Local Coordinator.
- ANDROID Application Development workshop by APTRON Solutions Pvt. Ltd. at Govt. Engineering College, Ajmer as a Coordinator on February 2nd, 2018
- Dept. of Science and Technology, Govt. of India sponsored Science Communication Programme of 1 day at Govt. Engineering College, Ajmer as a Coordinator on January 24th, 2018
- International Conference on “Security Of Information And Networks (SIN 2017)” at Manipal University, Jaipur as a Program Committee Member, October 13-15, 2017
- Dept. of Science and Technology, Govt. of India sponsored workshop on “Awareness about Cyber Crime” at Govt. Engineering College, Ajmer as a Coordinator, March 16-18, 2017.
- International Conference on “Signal Propagation and Computer Technology (ICSPCT 2014)” at Govt. Engineering College, Ajmer as a Member, July 12-13, 2014

- Workshop on “Promoting Excellence in Research” at Govt.Engineering College, Ajmer as a CoCoordinator, Feb4-8, 2014
- National Seminar on “Recent Advances in Wireless Networks and Communication” at Govt. Engineering College, Ajmer Under AICTE as a Committee Member, Jan17-18, 2014
- National Conference on “Security in Computer Networks and Distributed System” Sponsored by AICTE & TEQIP-II at Govt. Engineering College, Ajmer as a Co-Chair, Jan 9-10, 2014
- STC on “Open Source Technology and Tools” at Govt. Engineering College, Ajmer Under TEQIP-II as a Co-Coordinator, July30-August3, 2013
- Conference on “Emerging Trends and Applications in Computer Engineering” at Govt. Engineering College, Ajmer as a Member in April 2008
- “BPL SC Candidates Training” at Govt.Engineering College, Ajmer as a Member, Feb11-May30, 2008
- Conference on “Emerging Trends and Applications in Computer Engineering.” at Govt. Engineering College, Ajmer as a Co-Convenor on April 13, 2007.
- “Short Term Practical Training on VB.net Technology” at Govt. Engineering College, Ajmer as a Member, June20-Aug5, 2006
- “Development of College Websites” in 2006

Workshops/ FDP/ Training’s Participated

- One Week National Level Online Faculty Development Program on Recent Advances in Data Science, Data Analytics and Cyber Security from 1-5 March 2023, Department of Computer Science and Engineering, Shri Vishnu Engineering College for Women(A), Bhimavaram
- 1 week IEEE CIS Summer School on ”Research Trends in AI and Machine Learning for Engineering Challenges” organized by MNIT Jaipur 6-10 Dec 2022
- Two week Online Faculty Development Programme on “Malware Analysis with Data Science” from 29-Aug-2022 to 9-Sept-2022 organized by NIT Patna
- One day Faculty Development Program on “MetaVerse and Web 3.0” on 22-July-2022 organized by TCS for Engineering College Ajmer
- 1 Week STC on “Cryptography for Information Security” from 09-13 May, 2022 organized by NITTTR Chandigarh
- 1 week AICTE Sponsored QIP Short Term Course on “CYBER SECURITY FOR NEXT GENERATION TECHNOLOGIES: CHALLENGES AND SOLUTIONS” organized by Dept. of CSE, IIITDM Kancheepuram from 07.03.2022 to 12.03.2022
- 1 week Short term Course on AICTE Training And Learning (ATAL) Academy Online FDP on “Cyber Security: A step towards awareness to Cyber Crime” from 2021-06-14 to 2021-06-18 by ENGINEERING COLLEGE AJMER.
- “Basic Lecture Series on Malware Analysis” under Reverse Engineering & Malware Analysis Club (REMAC), School of Information Technology, Artificial Intelligence & Cyber Security (SITAICS), Rashtriya Raksha University (RRU), Gujarat, India from 27-30th May, 2021.
- One Week, Short-Term Training Program on “INDUSTRY 4.0 & CONDITION MONITORING” from 15th to 19th March, 2021 by Engineering College Ajmer
- 1 week online Professional Development Training from February 01-05, 2021 by Indian Institute of Management Raipur
- 1 week Short term Course on AICTE Training And Learning (ATAL) Academy Online FDP on “Internet of Things (IoT) (Applications in Biomedical Instrumentation, Healthcare and Pharma)” from 2020-10-12 to 2020-10-16 at WOMEN ENGINEERING COLLEGE AJMER.

- 1 week Short term Course on “ICT in Research, Teaching and Learning” sponsored by TEQIP-III from September 7th to 11th, 2020 at Engineering College Ajmer
- 1 week faculty training program on “Machine Learning Technologies for Social Media Analytics” organized by IIT Guwahati under ISEA Project Phase-II from 19th-23th August, 2020
- 1 week Online Faculty Development Programme on “Image Processing toward Data Science” Organized by Department of Computer Science & Engineering, Meenakshi College of Engineering, Chennai from July 6th, 2020 to July 10th, 2020.
- 2 weeks online Faculty Development Programme on “Machine Learning for Computer Vision” jointly organized by Electronics and ICT Academies during June 29- July 8, 2020
- 5 days Online Faculty Development Programme on “Data Science Industry Trends” Organized by Department of Information Technology , Panimalar Engineering College, Chennai in association with Computer Society of India from June 22nd, 2020 to June 26th ,2020.
- 1 week online faculty development program on “Open Source Learning Management System: Modular Object-Oriented Dynamic Learning Environment (MOODLE)” organized by Department of Electronics Engineering, A.M.U., Aligarh in association with Spoken Tutorial Project, IIT Bombay from 16th June to 20th June 2020.
- 1 week FDP (online) on “Research Trends in Image Processing” from June 15th to 19th, 2020 organized by GATES Institute of Technology, Andra Pradesh.
- 1 week Short term Course on “Deep Learning: An Emerging Technology” sponsored by TEQIP-III from Dec 17th to 21st, 2019 at Engineering College Ajmer.
- 1 week Short term Course on “Networking Tools & Technologies” sponsored by TEQIP-III from Nov 4th to 8th, 2019 at Engineering College Ajmer.
- 1 week Short term Course on “Nature Inspired Computational Techniques for Engineering & Sciences” sponsored by Information Management and Coordination Department, NITTTR Chandigarh from Sep 23 to Sep 27, 2019 at Engineering College Ajmer.
- 1 week Short term Course on “Emerging Trends and Innovation in Engineering & Science” sponsored by TEQIP-III on July 08- Aug 02, 2019 at Govt. Engineering College Ajmer.
- 5 Day FDP on “Robotics & AI” from June 24-28, 2019 at Govt. Engineering College Ajmer (Remote Center) under Electronics & ICT Academy, MNIT Jaipur.
- 5 Day FDP on “Introduction to Programming: A Pedagogical Approach” from June 17-22, 2019 at Govt. Engineering College Ajmer (Remote Center) under Electronics & ICT Academy, MNIT Jaipur.
- One day workshop on “Outcome Based Education” sponsored by TEQIP-III on July 5, 2019 at Govt. Engineering College, Ajmer
- 5 Day FDP on “Deep Learning & Applications” from May 27-31, 2019 at Govt. Engineering College Ajmer (Remote Center) under Electronics & ICT Academy, MNIT Jaipur.
- 5 Day FDP on “Network Security” from May 20-24, 2019 at Govt. Engineering College Ajmer (Remote Center) under Electronics & ICT Academy, MNIT Jaipur.
- TEQIP-III Review Meeting at ICT Mumbai on 30th April 2019.
- 2 day Python Workshop by Zeetron Networks Pvt. Ltd. at GECA from 14 Sep 2018- 15 Sep 2018
- 1 week STC on “Differential Equations and Their Applications in Sciences and Engineering”, March 1-5, 2019 at Govt. Engineering College Ajmer
- 5 Day FDP on ANN & Deep Learning from June 11-15, 2018 at Govt. Engineering College Ajmer (Remote Center) under Electronics & ICT Academy, MNIT Jaipur.
- Five day “TEQIP-III Summer Training Program on Active Learning” during June 4th - June 8th 2018 conducted at IIT Bombay under KITE Initiative of MHRD, Govt. of India.

- One week GIAN short term course on “Principles and Practice of Software Protection” at MNIT Jaipur from December 12-18, 2017
- One week GIAN short term course on “Analytical Reasoning & Experimental Learning with Applications to Software and Program Analysis” at MNIT Jaipur from October 9-13, 2017
- One week GIAN short term course on “Mobile Systems Security” at MNIT Jaipur from September 12-16, 2016
- One week GIAN short term course on “Managing the Complexity, Security, and Safety of Large Software” at MNIT Jaipur from November 21-25, 2016
- Two week FDP Recent Trends and Technology in Information, Communication & Computing (RTTICC-2016) at Govt. Engineering College, Ajmer from 23 Feb - 3rd March , 2016
- One week National workshop on “Green Energy and Technology” by Dept. of Electrical and Mechanical Engineering(Under TEQIP-II) at Govt. Engineering College, Ajmer from February 01-05, 2016
- One week FDP on Information Security and Challenges(ISC-2015) at Department of Computer Science Engineering, MNIT Jaipur from 16-20 November 2015
- 2 day Workshop at MNIT Jaipur during International Conference SPACE-2015, October 3-4, 2015
- One week STC on “Recent Advancements in Automotive Technology through ICT” by Department of Mechanical Engineering, GEC Ajmer from 10-14 August 2015
- Two day National Seminar on “Emerging Technologies in Computer Engineering” by Department of Computer Engineering, SKIT Jaipur from 7-8 Feb 2015
- Seminar on “Scientific and Technical Terminology” by Department of Higher Education, MHRD Delhi at Govt. Engineering College, Ajmer, Feb 5-6, 2014
- FDP on “Curriculum Development and Execution” at Govt. Engineering College, Ajmer, Jan27-31, 2014
- “Open Source Technology” at GECA , July30-Aug3, 2013.
- “CISCO Education Day” at CEG Jaipur, Sept20 2008
- “IBM Tivoli Reach Training Program” by IBM at Govt. Engineering College, Ajmer in 2006
- 2 weeks “Faculty Enablement Programme by Infosys under Campus Connect Initiative.” at Infosys Hyderabad, May - June 2006

Webinars Participated

- 1 day webinar on “Challenges in Good Learning and Assessment - Post COVID” held on Aug 8th 2020 by Prof. N C Shivprakash, Engineering College Ajmer
- One day webinar on “Virtual Labs” Jointly organized by Virtual Labs: An MHRD Govt of India Initiative & Engineering College, Ajmer on 20th July, 2020.
- One day webinar on “Education 4.0: The Revolution” by Shri Vishwakarma Skill University, Haryana on May 11, 2020
- One Day National Webinar on “Data Science and Applications” by Government College of Engineering, Aurangabad & Karad on May 23, 2020.
- Webinar on “A Force for Space: Artificial Intelligence” by IEEE SB MUJ & IEEE CS MUJ on June 18th, 2020
- Webinar on “Data Science and Applications” by Government College of Engineering, Aurangabad, and Karad on May 23rd, 2020
- Webinar on “Education 4.0: The Revolution” by Shri Vishkarma University, Haryana on May 11, 2020
- Webinar on “Outcome Based Education Software” by VMEDULIFE on June 4th, 2020
- Webinar on “Demystifying Artificial Intelligence with Microsoft cloud, Azure!” on June 9th, 2020 by SHAH & ANCHOR KUTCHHI ENGINEERING College, Mumbai

Research Projects and Consultancy

- Co-PI in project titles “Robust Forensic Analysis of Unmanned Aerial Vehicle using Federated Learning and Deobfuscation Techniques” by SERB, DST with grant of Rs. 30 Lakh (Date of Sanction: 8/5/23).
- Co-PI in Project titled “Performance Measurement of Security Algorithms on IoT Devices” under competitive research scheme by Rajasthan Technical University (TEQIP-III) with grant of 2,40,000/-. (Date of Sanction: 25/09/2019)
- CCTV Consultancy to “The Mandawara Instruments, Jaipur” for Nagar Palika Sarwar, Nagar Palika Kekri, Nagar Palika Rani

Memberships

- **ISTE** Life Time member
- Member of International Association of Computer Science and Information Technology (**IACSIT**)

Others

- Judge in activities organized online during (31/07/21-10/08/21) under National Education Policy 2020 –Online Competitions.
- SPoC for Vdo2Learn video library by EduNeev Solutions Private Limited and Parivartan Foundation

Administrative Responsibility

- *Student Induction Program 2021-22, 2022-23* Coordinator
- *HoD, CSE Department* HoD (Nov 21, 2020-Till Date)
- *Alumni Meet - MILAN 2023* Core Committee Member
- *Higher Study Scrutiny Committee* Member (Nov 21, 2021-Till Date)
- *E-lecture and E-Video Committee* Convener (June 18, 2021-Till Date)
- *College Website Development and Management Committee (10/08/2022 to Till Date)* Nodal Officer
- *Convener, Institute Innovation Cell* Convener (September 06, 2021- Aug 09, 2022)
- *Convener, Cyber Security Club* Convener (March 27, 2021-Till Date)
- *Member, IQAC Cell* Member (Feb 27, 2020-Till Date)
- *Convener, Industry Consultation Committee, Department of CSE* Convener (May 21, 2021-Till Date)
- *Student Induction Program* Coordinator (Session 2020-21)
- *AI ML Club* Convener (26 November 2021 to till date)
- *Nodal Officer Virtual Labs* Nodal Officer (June-2020 to Till Date)
- *Value Cell - Cell for Happiness* Member (1 July 2020 to Till Date)
- *Internal Quality Assurance Cell* Member (27 Feb 2020 to Till Date)
- *Inter-Institute Hackathon Coordinator* 26 Feb 2020 to Till Date
- *Alumni Meet - MILAN 2019* Member
- *Convocation 2019* Member
- *Institute Annual Report Preparation* Member (2018-2019, 2019-20)

• Nodal Officer Twinning Activities TEQIP-III	Nodal Officer (Apr-2019 to Till Date)
• Cyber Security Club	Convener (27 March 2021 to till date)
• Cyber Security Club	Coordinator (March-2019 to 26 March 2021)
• College Level Anti Ragging Squad	2018-19
• Coordinator of Workshop by Badlee Corporation under Start-up Cell	18 Aug 2018
• Convocation (Online Registration and Streaming Committee)	2018
• Department First Year Coordinator	2018-2019
• Department First Year Coordinator	2017-2018
• SPoC in Smart India Hackathon (SIH) 2017, 2018, 2019, 2020 contest organized by AICTE	
• Institute TEQIP-II Committee	NO-MIS(Nov-2016 to May-2017)
• Department Guest Faculty Incharge (2016-17)	Incharge
• Tarangini-2K16	Coordinator
• Women Cell (Nov-2015 to 4-2-2020)	Member
• Department PG Coordinator (Aug-2014 to June-2016)	Coordinator
• College Website Development and Management Committee (Sep-2015 to July-2016)	Coordinator
• College Website Development and Management Committee (Aug-2016 to 5/12/20)	Nodal Officer
• AICTE/RTU Cell (Sep-2015 to May 21, 2019)	Member
• College Website Development and Management Committee (Dec-2014 to Sep-2015)	Member
• TEQIP Committee (Dec-2014 to July-2015)	Astt. Nodal Officer Academics
• Proctor (July-2014 to Dec-2014)	member
• UG Admission Committee (Session 2014-15)	member
• PG Admission Committee (Session 2015-16)	member
• Hostel Warden(July-2014 to Oct 2014)	warden
• Department PG Co-Coordinator (July-2013 to July-2014)	Co-Coordinator
• Website Committee	Convener (July-2007 to June-2011)
• AICTE Committee	Member(July-2007 to June-2011)
• Institute TEQIP Committee	Member(July-2010 to June-2011)
• Department Time Table Coordinator	Coordinator(July-2010 to June-2011)

Additional Services

- Member of Screening Committee of CAS at RPSC Ajmer, January 2022
- Member of Inspection committee for affiliated colleges of ILD Skill University, Jaipur since January 24, 2022.
- Observer in CTET 2021 conducted by CBSE
- Subject Expert in Interview of FCSA at Jawahar Navodaya Vidyalaya, Bhilwara