

# Jyoti Gajrani

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<b>Address (Home)</b>	1554/2, Pancholi Chouraha Ram Nagar, Ajmer	<b>Designation</b>	Assistant Professor
<b>Address (College)</b>	Govt. Engg. College, NH-8, Near Narely Jain Temple, Badllaya, Ajmer	<b>Phone</b>	9460031242
		<b>Email</b>	jyotigajrani@gmail.com

Google Scholar Profile

## Education

**2015-Present** PhD (Computer Engineering) - Malviya National Institute of Technology, Jaipur

Course Work - 9.5 (CPI)

Area of Research - Android Security

Research Advisor: Prof. M.S. Gaur & Dr. Meenakshi Tripathi

**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

## Employment History

**March 2006** - Govt. Engineering College, Ajmer

**Present** *Astt. Professor*

**Sept 2005-** DRDO (Defence Lab, Jodhpur

**March 2006** *Research Fellow*

## Teaching Interests

Post Graduate and Graduate ; Linux-Shell Programming, Databases, Computer Architecture, System Software, C/C++ Programming, Operating Systems, Information Security

## Master's Thesis Guided

- Swatantra Porwal, "Extension of PMIPv6 Model for NEMO-Smart in VANET", Since July 2014 : **Completed**
- Bhawana Mewara, "A Robust Client Side Defense for Reflected Cross-Site Scripting", Since July 2013 : **Completed**
- Sheetal Bairwa, "Detection and Robust Solution against Phishing Attacks", Since July 2013 : **Completed**

- Mohit Sharma (Student of MANIT, Bhopal), “Smartphone Malware Analysis through Text Mining ”, Since July 2014 : **Completed (Co-Guide)**
- Taresh Mishra, “Android Malware Analysis”, Since July 2014 : Ongoing
- Surendra Kumar, “Intrusion Detection System”, Since July 2014 : Ongoing
- Bhawana Sharma, “Internet of Things”, Since July 2015 : Ongoing
- Abhinav Mathur, “Big-Data”, Since July 2016 : Ongoing
- Kapil Kumar, “Big-Data”, Since July 2017 : Ongoing

## Journal Publications

- Tripathi, Meenakshi, Jyoti Gajrani, and Vinesh Kumar Jain. ”Mobile Security: Attacks and Prevention-Security in Mobile Communication.” Routing Protocols and Architectural Solutions for Optimal Wireless Networks and Security. IGI Global, 2017. 43-59.
- “Augmentation of the Classification Performance of Least Square support vector machine using Simple Particle Swarm Optimization for Phishing Dataset”, Sheetal Bairwa, Jyoti Gajrani, Vinesh Jain in “IJET-MAS Special Issue” Nov 2015, ISSN 2349-4476
- “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
- “Enhancement of Salt and Pepper Noise Image using Sharpness Indexed Filtering”, Santosh Kumar Singh, Vinesh Jain, Rakesh Rathi, Jyoti Gajrani in “International Journal of Engineering and Technical Research (IJETR), ISSN: 2321-0869, Volume-3, Issue-5”, May 2015
- “Vulnerability Scanners : A Proactive Approach to assess web application security ”, Sheetal Bairwa, Bhawana Mewara and Jyoti Gajrani in “IJCSA, Volume 4, No.1, ISSN 2200-0011, DOI:10.5121/ijcsa.2014.4111” , Feb-2014
- “Analysis of Searching Techniques and Design of Improved Search Algorithm for Unstructured Peer-to-Peer Networks”, Yash Pal Singh, Rakesh Rathi, Jyoti Gajrani, Vinesh Jain, in “IJCNS , Volume 2, No.4, ISSN 2076-2739” , April-2010
- “Two Level TTL for Unstructured P2P Network using Adaptive Probabilistic Search”, Yash Pal Singh, Rakesh Rathi, Jyoti Gajrani, Vinesh Jain, in “IJSER, Volume 3, Issue 1 ISSN 2229-5518, January 2012”
- “Semi Structured Data”, Hari Prabhat Gupta, Rakesh Rathi, Jyoti Tilokchandani, Prakriti Trivedi, in “41st Annual National Convent” Organised By: CSI-2006, in 2006.

## Conference/ Workshop Publications

- “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 Ahemdabad(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.
- “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)
- “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
- “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/ICCSP2014.6949950
- “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 (IC-SPCT 2014) ” at GECA, Ajmer (12-13 July 2014) , DOI: 10.1109/ICSPCT.2014.6884966
- “Expert System in Real World Organisation”, Anita Choudhary, Rakesh Rathi, 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 Rathi, 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

## Books Publications

- “**Telecommunications Engineering and Fundamentals**”, Dr. S. C. Jain, Vinesh Jain, Jyoti Tilokchandani, Rakesh Rathi, Published By: RBD Publications, 2008

## Expert Lectures/Workshops

- Lecture on “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

- Tutorial presentation on “Understanding Android Security” at Manipal University, Jaipur in SIN 2017 conference
- Two day workshop on “Android App Development” at IIT Jammu on Sep 19-20th, 2017
- Lecture on “Importance and Utility of English Language in field of Computers” at Dayanand College, Ajmer
- Lecture on “Computer Fundamentals” at Mahirshi Dayanand Sarawati University, Ajmer for PhD students
- Lecture on “Android Malware Analysis” at Govt. Engineering College, Ajmer in 2 week FDP RTTICC-2016.
- Lecture on “CyberSecurity and SmartPhone Security” at Shri Govindsingh Gurjar Govt. College, Nasirabaad on August 13, 2016.

## **Conference/ Seminar/Short Term Training Organized**

- 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 April13, 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/ Trainings Participated**

- 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

## Recognition & Certifications

- 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

## Memberships

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

## Administrative Responsibility

- *Department First Year Coordinator* 2017-2018
- SPoC in Smart India Hackanthon (SIH) 2017 & 2018 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 Till Date)* 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 Till Date)* Coordinator
- *AICTE/RTU Cell (Sep-2015 to Till Date)* Member
- *College Website Development and Management Committee (Dec-2014 to Sep-2015)* Member
- *TEQIP Committee (Dec-2014 to July-2015)* Astd. 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)

## Other Information

- Successfully conducted online exams for RPSC Ajmer, NASSCOM, Railway Recruitment Board, TCS etc.
- Answer book evaluation: BCA, B.Tech, MCA, M.Tech for Rajasthan University, Jai Narayan Vyas University Jodhpur, RTU Kota, Maharana Pratap University Udaipur, Mohan Lal Sukharia University Udaipur.
- Question paper setting: BCA, B.Tech, MCA, M.Tech for Rajasthan University, Jai Narayan Vyas University Jodhpur, RTU Kota, Maharana Pratap University Udaipur.
- Practical Examination: BCA, B.Tech, MCA, M.Tech for Rajasthan University, RTU Kota, Bhagwant University.