

CURRICULUM VITAE

Dr. RAJENDRA KUMAR

Professor

Department of Computer Science

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Research Interest: Information Security, Cyber Security, IoT, Data Analytics.

1. Published Work

(a) Research Papers (Journals)

1. R. Kumar, K. Mustafa; "Security Requirements and related Developments", International Journal of Advanced Computing (IJAC), Vol. 2, Issue 1, Jan 2010, pp 18-25
2. R. Kumar, Mustafa K; "Security Requirements Development Framework (^SRDF)", International Journal of Advanced Research in Computer Science, Volume 2, No. 5, Sept-Oct 2011, pp 559-566
3. R. Kumar; "Elicitation and Structured Representation Modeling of Security Requirements for Authentication Vulnerabilities in web Applications", International Journal of Advanced Research in Computer Science and Software Engineering, Volume 2, No. 6, June 2012, pp 258-264.
4. R. Kumar; "Revisiting Security Vulnerabilities: Web Applications Perspective", International Journal of Advanced Research in Computer Science and Software Engineering, Volume 3, No. 6, June 2013, pp 1653-1659.
5. R. Kumar; "Reducing the Impact of Code Injection Vulnerabilities for Cloud Offerings", International Journal of Advanced Research in Computer Science and Software Engineering, Volume 3, No. 6, June 2013, pp 1660-1663.
6. Rashi Aggarwal, R. Kumar; "A Comprehensive Review of Numerical Weather Prediction Models", International Journal of Computer Applications (0975 – 8887)", Foundation of Computer Science New York, USA, Volume 74– No.18, July 2013, pp 44-48."
7. Rashi Aggarwal and Rajendra Kumar. Article: "Effect of Training functions of Artificial Neural Networks (ANN) on Time series forecasting." 109(3):14-17, January 2015. Published by Foundation of Computer Science, New York, USA.
8. Taran Singh Bharati and R. Kumar; "Intrusion Detection System for MANET using Machine Learning and State Transition Analysis", International Journal of Computer Engineering & Technology (IJCET) Volume 6, Issue 12, Dec 2015, pp. 01-08, Article ID: IJCET_06_12_001 Available online at <http://www.iaeme.com/IJCET/issues.asp?JType=IJCET&VType=6&IType=12> ISSN Print: 0976-6367 and ISSN Online: 0976–6375 © IAEME Publication

9. Vinod Kumar; Rajendra Kumar; Santosh Kumar Pandey; Mansaf Alam; "Fully Homomorphic Encryption Scheme with Probabilistic encryption Based on Euler's Theorem and application in Cloud Computing", Conference Proceedings of CSI-2015: 50th Golden Jubilee Annual Convention on Digital Life (02nd – 05th Dec, 2015) Computer Society of India (CSI), Delhi.
10. R. Kumar; "Harnessing Big Data Analytics for Improving Information Security Practices", International Journal of Innovative Research in Computer and Communication Engineering (IJIRCCE), Vol. 4, Issue 2, February 2016, pp 1350-1356, DOI: 10.15680/IJIRCCE.2016.0402043, ISSN(Online): 2320-9801, ISSN (Print): 2320-9798
11. Taran Singh Bharati and R. Kumar; "Enhanced Key Distribution for Mobile Adhoc Networks", International Journal of Engineering Science and Computing (IJESC), Vol. 6, Issue 4, April 2016, pp 1-4, ISSN (Online): 2321 -3361, Print ISSN (Print): 2250 -1371
12. R. Kumar; "Efficient and Secure Multi Owner Data Sharing Scheme with Load Balancing for Dynamic Groups in the Cloud", International Journal of Advance Research in Computer Science and Management Studies (IJARCSMS), Vol. 4, Issue 5, May 2016, pp 183-187, ISSN: 2321-7782 (Online)
13. Kumar V., Kumar R., Pandey S.K., "A computationally efficient centralized group key distribution protocol for secure multicast communications based upon RSA public key cryptosystem", in Journal of King Saud University – Computer and Information Sciences (2018), Elsevier, DOI: 10.1016/j.jksuci.2017.12.014. (ESCI Indexed)
14. Kumar, V., Kumar, R. & Pandey, S.K. "Polynomial based non-interactive session key computation protocol for secure communication in dynamic groups". International journal of Information Technology, Springer. 12, 283–288 (2018). DOI: <https://doi.org/10.1007/s41870-018-0140-1>(UGC Listed)
15. Arun Kumar Bediya, Rajendra Kumar: "Review of Security and Privacy of Internet of Things from Botnet Attack: Challenges and Solutions", International Journal of Modern Electronics and Communication Engineering (IJMECE), Vol. 6, Issue 4, July, 2018, pp 119-121, ISSN: 2321-2152.
16. Subodh kumar, Rajendra kumar, Sushil kumar, Sunil Kumar: "Cryptographic construction using coupled map lattice as a diffusion model to enhanced security", Journal of Information Security and Applications 46(2019) 70–83, Elsevier, <https://doi.org/10.1016/j.jisa.2019.02.011>.
17. Arun Kumar Bediya, Rajendra Kumar: "A layer-wise security analysis for Internet of Things Network: Challenges and Countermeasures", International Journal of Management, IT & Engineering, Vol. 9, Issue 6, June, 2019, pp 118-133, ISSN: 2249-0558.
18. Deena Nath Gupta, Rajendra Kumar: "Lightweight Cryptography: an IoT Perspective", International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075, Volume-8 Issue-8 June, 2019, pp 700-706.
19. Subodh kumar, Rajendra kumar: "A Modified Image Encryption Technique Using Two Dimensional Sine Logistic Map", International Journal of Computer Sciences and Engineering, Vol. 7, Issue 3, March 2019, pp 1110-1115, ISSN: 2347-2693.
20. Arun Kumar Bediya, Rajendra Kumar: "A Novel Intrusion Detection System for Internet of Things Network Security", Journal of Information Technology Research (JITR), Web of Science, ESCI, Volume 14 • Issue 3 • July-September-2021 • ISSN: 1938-7857 • eISSN: 1938-7865

21. Arun Kumar Bediya, Rajendra Kumar: "CEIR based Smartphones Anti-stolen System: SASSCEIR", International Journal of Engineering and Advanced Technology (IJEAT), Volume-9 Issue-1, October 2019, ISSN: 2249-8958 (Online), 6940-6944
22. Deena Nath Gupta and Rajendra Kumar, "Networking in IoT: Technologies used, security threats and possible countermeasures," International Journal of Sensors, Wireless Communications and Control (2020) 10: 1. <https://doi.org/10.2174/2210327910666210106090826>
23. Raju, K.K.S Gautam, Rajendra Kumar "Machine Learning based IoT security system for COVID", International Journal of Advanced Science and Technology (IJAST), SCOPUS, 23-Apr.-2020.
24. Kumar V., Kumar R., Pandey S.K., "A Computationally Efficient and Scalable Key Management Scheme for Access Control of Media Delivery in Digital Pay-TV Systems", in Multimedia Tools and Applications (2020) Springer, DOI: <https://doi.org/10.1007/s11042-020-08904-8>. (SCIE Indexed, Impact Factor: 2.313).
25. Kumar, V., Kumar, R. & Pandey, S.K., "LKM-AMI: A Lightweight Key Management Scheme for Secure two way Communications between Smart Meters and HAN Devices of AMI system in Smart Grid", in Peer-to-Peer Networking and Applications (2020), Springer, DOI: 10.1007/s12083-020-00921-6 (SCIE Indexed, Impact Factor: 2.793).
26. Kumar, V., Kumar, R. & Pandey, S.K., "A secure and robust group key distribution and authentication protocol with efficient rekey mechanism for dynamic access control in secure group communications", in International Journal of Communication Systems (2020), Wiley, DOI: <https://doi.org/10.1002/dac.4465> (SCIE Indexed, Impact Factor: 1.319).
27. Subodh Kumar, Rajendra Kumar: "An Image Encryption Model Using, Brownian motion Intertwining Logistic Map and Coupled Map Lattice", in International Journal of Grid and Distributed Computing Vol. 13 No. 2 (December 2020), ISSN: 2005-4262.
28. Tyagi, H., Kumar, R. (2021). "Attack and anomaly detection in IoT networks using supervised machine learning approaches". Revue d'Intelligence Artificielle, Vol. 35, No. 1, pp. 11-21. <https://doi.org/10.18280/ria.350102>.
29. Krishan Kant Singh Gautam, Rajendra Kumar, Subodh Kumar "A Survey on Image Encryption Techniques Enabled with Internet of Things (IOT). Design Engineering, Issue: 6 (2021), pp 205 – 213 ISSN: 0011-9342 Retrieved from <http://www.thedesignengineering.com/index.php/DE/article/view/1953>
30. Krishan Kant Singh Gautam, Rajendra Kumar "IoT and object identification enabled Smart Home Security System" *International Journal of Mechanical Engineering*. Vol. 7 (Special Issue 3, Jan.-Feb. 2022). ISSN: 0974-5823 pp. 16-23.
31. Krishan Kant Singh Gautam, Rajendra Kumar "Security Awareness Model for Artificial Intelligence and Internet of Things". International Journal on Recent and Innovation Trends in Computing and Communication, vol. 10, no. 12, Dec. 2022, pp. 203-10, <https://ijritcc.org/index.php/ijritcc/article/view/5936>.
32. Gupta, Deena Nath, and Rajendra Kumar. "Multi-Layer and Clustering-Based Security Implementation for an IoT Environment," International Journal of System Dynamics Applications (IJSDA) Vol.11, no. 2 (2022), pp: 1-21. <https://doi.org/10.4018/IJSDA.20220701.0a3>

33. K. Bhatia, S. Pandey, V. Singh, D. Gupta, and R. Kumar, "Implementing Lightweight Cryptography in Enterprises Adopting IoT for IT Transformation", ANSDN, vol. 10, no. 01, Jul. 2022.
34. Gupta, Deena Nath; Kumar, Rajendra, "DeeR-Hash: A lightweight hash construction for Industry 4.0 / IoT," Journal of Scientific & Industrial Research, Vol. 82, No. 1, 2023, pp. 142-150. <https://doi.org/10.56042/jsir.v82i1.69938>

(b) Conferences:

1. R. Kumar, S. K. Pandey, S. I. Ahson: "Security in Coding Phase of SDLC", Proceedings of the Third IEEE International Conference on Wireless Communications and Sensor Networks (WCSN 2007), Allahabad, India, Dec 13-15, 2007, pp 177-179 (**IEEE Xplore**).
2. R. Kumar, S. K. Pandey: "Security as a Lifecycle Activity: Requirement Phase Perspective", Proceedings of the International Conference on Web Engineering and Applications (ICWA 2007), Bhubaneshwar, India, Dec 14-16, 2007, pp 87-94.
3. R. Kumar, S. K. Pandey: "Information Security in the Academia", Proceedings of the International Conference on Soft Computing and Intelligent Systems, Jabalpur, India, Dec 27-29, 2007, pp 275-278.
4. R. Kumar; "Mitigating the Authentication Vulnerabilities in Web Applications through Security Requirements", World Congress On Information and Communication Technologies (WICT 2011), Mumbai, December 11-14, 2011 (**IEEE Xplore**).
5. R. Kumar; "Secure Error Handling and Reporting (ErHaR) in Web Applications", International Conference on Technological Advancement and Research, Goa, December 18-19, 2013.
6. T. S. Bharati; R. Kumar; "Secure Intrusion Detection System for Mobile Adhoc Networks", Proceedings of the 9th INDIACOM; IEEE Conference ID: 35071, Delhi, INDIA, March 11-13, 2015, pp 855-859.
7. R. Kumar; "Analysis of Key Critical Requirements for Enhancing Security of Web Applications", Conference Proceedings of 2015 International Conference on Computers, Communications, and Systems (ICCCS), November 2-3, Kanyakumari, India, 2015, pp 241-245, IEEE Catalogue Number: CFP15D48-PRT, ISBN: 978-1-4673-9755-1, IEEE Press.
8. Kumar V., Kumar R., Pandey S.K.(2017) "Fully Homomorphic Encryption over Integers " a technical poster presented in the Global Conference on Cyber Space (GCCS) held on November 23-24 , 2017 at New Delhi.
9. Kumar V., Kumar R., Pandey S.K., Alam M. (2018) 'Fully Homomorphic Encryption Scheme with Probabilistic Encryption Based on Euler's Theorem and Application in Cloud Computing". In Big Data Analytics- Proceedings of CSI 2015, Advances in Intelligent Systems and Computing, Springer, Singapore, vol 654, pp 605-611, DOI: 10.1007/978-981-10-6620-7_58. (Scopus Indexed)
10. Kumar, V., Kumar, R. & Pandey, S.K.,(2018) "An Enhanced and Secured RSA Public Key Cryptosystem Algorithm Using Chinese Remainder Theorem", in third International Conference, NGCT 2017, Smart and Innovative Trends in Next Generation Computing Technologies, Communications in Computer and Information Science(CCIS), Springer, pp. 1-12, DOI: 10.1007/978-981-10-8660-1_42. (Scopus Indexed)

11. Subodh Kumar, Rajendra Kumar, & Sushil Kumar, (2018, October). "A modified novel Image Encryption Technique using three dimensional cat map and Transformation". In 2018 International Conference on Sustainable Energy, Electronics, and Computing Systems (SEEMS) (pp. 1-5). IEEE.
12. Kumar V., Kumar R., Pandey S.K.(2019) "An Efficient Distributed and scalable Key Management Scheme using Ternary Tree for Secure Communication in Dynamic Groups", in International Conference Emerging Trends in Information Technology(ICETIT-2019). (Scopus Indexed)
13. Kumar V., Kumar R., Pandey S.K.(2019) 'An effective and Secure key management protocol for access control in Pay-TV Broadcasting system using theory of numbers' in International Conference on Computing Applications in Electrical & Electronics Engineering (ICCAEEE-2019), Springer's, AIS series. (Scopus Indexed)
14. D. N. Gupta and R. Kumar, "Generating Random Binary Bit Sequences for Secure Communications between Constraint Devices under the IoT Environment," INCET, Bangaluru, India, June 6, 2020. pp. 1–6. <https://doi.org/10.1109/INCET49848.2020.9154009>
15. Raju, Rajendra Kumar, "Security of IoT Based Energy Conservation Systems: A Descriptive Approach", National Conference on DREFT-2020, ISBN: 978-93-5406-098-4, Page No. 33-35, Feb-27,2020.
16. Subodh Kumar, Rajendra Kumar, presented paper entitled: "Development of new color image encryption algorithm based on Brownian Motion as diffusion model ". In 1st Online International Conference on "Rebuilding Bharat with Artificial Intelligence (AI) Interventions after COVID-19 Pandemic : Opportunity and Challenges, Gautam Buddha University on May 03, 2020, Greater Noida, U.P., India (201308).
17. Subodh Kumar, Rajendra Kumar, "Improved binary block embedding for reversible data hiding in encrypted images" in Online International Conference on Advances in Computing, Communication and Control" (ICA3C-2020) on 16/06/2020, organized by School of Computer Science and Applications, IIMT University, Meerut, Uttar Pradesh, INDIA.
18. Arun Kumar Bediya, Rajendra Kumar: "Real Time DDoS Intrusion Detection and Monitoring Framework in 6LoWPAN for Internet of Things", 2020 IEEE International Conference on Computing, Power and Communication Technologies (GUCON) Galgotias University, Greater Noida, UP, India. Oct 2-4, 2020
19. Arun Kumar Bediya, Rajendra Kumar: "Security Analysis for IoT Network against DDoS Attack: Modeling, Detection and Mitigation Techniques for DDoS Attack", International Conference on Transforming Through Reinvention in the Current Emerging Global Order "TTRCEGO -2020
20. Deena Nath Gupta and Rajendra Kumar, "A lightweight and energy efficient security system for automatic detection of fraudulent entries and safeguarding the bank premises using FSR based RNG and Sponge based hashing." In IDRBT **Doctoral Colloquium** (IDC-2021). <https://www.idrbt.ac.in/11th-idrbt-doctoral-colloquium/>
21. D. N. Gupta and R. Kumar, "Sponge based Lightweight Cryptographic Hash Functions for IoT Applications," 2021 International Conference on Intelligent Technologies (CONIT), 2021, pp. 1-5, doi: <https://doi.org/10.1109/CONIT51480.2021.9498572>
22. A. Kumar, D. N. Gupta and R. Kumar, "Hash Constructions for CoAP under an IoT Environment," 2021 International Conference on Smart Generation Computing, Communication and Networking (SMART GENCON), 2021, pp. 1-7, <https://doi.org/10.1109/SMARTGENCON51891.2021.9645791>

23. Krishan Kant Singh Gautam, Rajendra Kumar, Deena Nath Gupta "Challenges, Attacks, QoS, and Other Security Issues for An IoT Environment" in international conference on "Advancement in Computational and Computer Technologies" (ICACCT-2021) organized by Department of Computer Science and Engineering in Collaboration with UCRD, Chandigarh University, Gharuan, India, during 30-31 October 2021.
24. Krishan Kant Singh Gautam, Rajendra Kumar, and Deena Nath Gupta, "Challenges, attacks, QoS, and other security issues for an IoT environment", AIP Conference Proceedings 2555, 030008 (2022). <https://doi.org/10.1063/5.0109339>
25. Kumar Rajendra, Gupta Deena Nath, Kamal Kapil Kant, Joshi Padmaja, "Existing Research Challenges in IoT Applications." In 3rd International Conference on Internet of Things - ICIOT 2022, 5th – 7th April 2022.
26. Krishan Kant Singh Gautam, Rajendra Kumar et.al "Machine Learning Algorithms for 5G and Internet-of-Thing (IoT) Networks" 2022 IEEE Sponsored Second International Conference on Advances in Electrical, Computing, Communications and Sustainable Technologies (ICAECT 2022) held at the Department of Electrical and Electronics Engineering, Shri Shankaracharya Technical Campus (SSTC), Bhilai, Chhattisgarh, India during 21 - 22, April 2022. ISSN 978-1-6654-1120-2/22, DOI: 10.1109/ICAECT54875.2022.9808005.
27. Mohd Ahmed, Rajendra kumar, "Edge federated learning frameworks: analysis, challenges, and future directions". The "DONBOSCODELHICON23" the 2nd National Conference on "Atmanirbhar Bharat: Vision for Excellence Through Multidisciplinary Inclusive Approach". 20th May 2023.
28. Krishan Kant Singh Gautam, Rajendra Kumar, Rakesh Yadav and Preeti Sharma, "Investigation of the Internet of Things (IoT) Security and Privacy Issues," 2023 5th International Conference on Inventive Research in Computing Applications (ICIRCA), Coimbatore, India GB, 2023, pp. 1489-1494, doi: 10.1109/ICIRCA57980.2023.10220814. <https://ieeexplore.ieee.org/document/10220814/authors>.

(c) Book Chapters:

1. D. N. Gupta, R. Kumar, and A. Kumar, "Efficient Encryption Techniques for Data Transmission Through the Internet of Things Devices," in *IoT and Cloud Computing Advancements in Vehicular Ad-Hoc Networks*, 1st ed., V. Jain, O. Kaiwartya, N. Singh, and R. S. Rao, Eds. Pennsylvania, United States: IGI Global, 2020, pp. 203–228.
2. Tyagi H., Kumar R. (2020) Cloud Computing for IoT. In: Alam M., Shakil K., Khan S. (eds) Internet of Things (IoT). Springer, Cham. https://doi.org/10.1007/978-3-030-37468-6_2, 25-41
3. Deena Nath Gupta and Rajendra Kumar, "Distributed Key Generation for Secure Communications Between Different Actors in Service Oriented Highly Dense VANET," in *Cloud and IoT-Based Vehicular Ad Hoc Networks*, Gurinder Singh, Vishal Jain, Jyotir Moy Chatterjee, and Loveleen Gaur, Eds., New Delhi, India: Scrivener-Wiley, April, 2021, pp. 221-232. <https://doi.org/10.1002/9781119761846.ch11>, Print ISBN:9781119761839 |Online ISBN:9781119761846
4. Kumar, A., Gupta, D.N., Kumar, R. (2023). Integration of Big Data and IoT in the Modern Era. In: Sindhvani, N., Anand, R., Niranjnamurthy, M., Chander Verma, D., Valentina, E.B.

(eds) IoT Based Smart Applications. EAI/Springer Innovations in Communication and Computing. Springer, Cham. https://doi.org/10.1007/978-3-031-04524-0_8

5. D.N. Gupta, R. Kumar, A. Kumar, "Federated Learning for IoT Devices," In: Yadav S.P., Bhati B.S., Mahato D.P., Kumar S. (eds) Federated Learning for IoT Applications. EAI/Springer Innovations in Communication and Computing. Springer, Cham, pp. 19-29, 2022. https://doi.org/10.1007/978-3-030-85559-8_2
6. D.N. Gupta, R. Kumar, S.H. Ansari, "Federated Learning for an IoT Application," In: Yadav S.P., Bhati B.S., Mahato D.P., Kumar S. (eds) Federated Learning for IoT Applications. EAI/Springer Innovations in Communication and Computing. Springer, Cham, pp. 53-66, 2022. https://doi.org/10.1007/978-3-030-85559-8_4
7. Deena Nath Gupta and Rajendra Kumar, "An IoT Approach of Managing Smart Healthcare Services." In: Singh P., Kaiwartya O., Sindhwani N., Jain V., and Anand R. (eds.), Networking Technologies in Smart Healthcare: Innovations and Analytical Approaches. CRC Press, Edition 1, pp. 398, 2022. <https://doi.org/10.1201/9781003239888>
8. Ashwani Kumar, Deena Nath Gupta, and Rajendra Kumar, "Integration aspects of AI, IoT, Big Data and Block chain in Healthcare industry." In: Singh P., Mishra D., and Seth K. (eds.), Transformation in Healthcare with Emerging Technologies. Chapman and Hall/CRC, Edition 1, eBook ISBN9781003201960.
9. Deena Nath Gupta and Rajendra Kumar (2021) 'Distributed Key Generation for Secure Communications Between Different Actors in Service Oriented Highly Dense VANET', in Gurinder Singh, Vishal Jain, Jyotir Moy Chatterjee, and Loveleen Gaur 'Cloud and IoT-Based Vehicular Ad Hoc Networks', Scrivener-Wiley, pp. 221-232. <https://doi.org/10.1002/9781119761846.ch11>
10. D. N. GUPTA, R. Kumar, and A. Kumar, "Efficient Encryption Techniques for Data Transmission Through the Internet of Things Devices," in IoT and Cloud Computing Advancements in Vehicular Ad-Hoc Networks, 1st ed., V. Jain, O. Kaiwartya, N. Singh, and R. S. Rao, Eds. Pennsylvania, United States: IGI Global, 2020, pp. 203–228. <https://doi.org/10.4018/978-1-7998-2570-8.ch011>

(d) Articles

1. S. Rehman, R. Kumar, S. K. Pandey: "Secure Software Development Life Cycle", Proceedings of Natural Science InfoFest (NSIF 2008), Jamia Millia Islamia, N. Delhi, March 4-6, 2008, pp 54-55.
2. R. Kumar: "Major IT Security Threats in 2008", Proceedings of Natural Science InfoFest (NSIF 2008), organized by Jamia Millia Islamia, N. Delhi, March 4-6, 2008, pp 55-56.

2. Conference/ Workshop/Seminar/ Training Attended

(a) International/ National Conference

1. Attended Third IEEE International Conference on Wireless Communications and Sensor Networks (WCSN 2007), Allahabad, India, Dec 13-15, 2007.
2. Attended International Conference on Soft Computing and Intelligent Systems, Jabalpur, India, Dec 27-29, 2007.
3. Attended World Congress On Information and Communication Technologies (WICT 2011), Mumbai, December 11-14, 2011.

4. Attended iGovernment's 1st ICT for development Conference 2013, New Delhi, India, Jan 14-15, 2013.
5. Attended International Conference on Technological Advancement and Research, Goa, December 18-19, 2013.
6. Attended International Conference on Computers, Communications, and Systems (ICCCS), November 2-3, 2015, Kanyakumari, India.

(b) International/ National Workshop

1. Attended National Workshop on Software Security (NWSS 2007), N. Delhi, India, Sep 13-14, 2007.
2. Attended National Workshop on IT for all, N. Delhi, India, Oct 31- Nov1, 2007.
3. Participated as Technical Expert in the Validation Workshop on Software Security (VWSS-2008), N. Delhi, India, Oct 21, 2008.
4. Attended National Workshop: *Q-CISM-2009: On "Futuristic trends of Quality Control in Information Security Management"* organized by *Forum for Interdisciplinary Sciences and Application (FiDAS)*, Deen Dayal Upadhyaya College, (University of Delhi), New Delhi-110015, India. The workshop is Sponsored by: Council of Scientific and Industrial Research(CSIR), Govt of India, October 09-11, 2009.
5. Attended 7th DBT-BIF National Workshop on 'Translation Bioinformatics- NWTB-2017', organized by Bioinformatics Infrastructure Facility Center, Department of Computer Science, Jamia Millia Islamia, N. Delhi, on February 15-16, 2017

(c) International/ National Seminar

1. Attended Orientation Programme for the Academic Counsellors, for the Programme MCA, BCA & CIC, organized under the auspices of IGNOU Regional Centre, N. Delhi-2, on Jan 5, 2002.
2. Attended Natural Science InfoFest (NSIF 2007), organized by Jamia Millia Islamia, N. Delhi, on Feb-March (28-2), 2007.
3. Attended International Seminar on 'IT Industry in India – Prospects, Retrospects, and Policies', organized by Jamia Millia Islamia, N. Delhi, on Nov 1-2, 2007.
4. Attended National Seminar on "e-Security Education through e-learning, e-learn '2007'", organized by CDAC, Noida, on Dec 14, 2007.
5. Attended "Electronics & Information Technology Exposition (ELITEX 2008)", organized by DIT, Ministry of Communications and IT, Government of India, on Jan 17-18, 2008.
6. Attended Natural Science InfoFest (NSIF 2008), organized by Jamia Millia Islamia, N. Delhi, on March (4-6), 2008.
7. Attended Science and Society Meet organized by Indian National Science Academy(INSIA), N. Delhi, on March (13-14), 2008
8. Attended "India as Innovation Hub" organized by Federation of Indian Chambers of Commerce & Industry(FICCI), N. Delhi, on September 8th, 2009.

9. Attended “The 5th IFIP World IT Forum (WITFOR 2012)” organized by IFIP (International Federation for Information Processing), N. Delhi, on April 16th -18th, 2012.
10. Attended “Government Analytics & Information Summit 2013” organized by iGovernment in association with SAS, N. Delhi, on August 23rd 2013.
11. Attended International Seminar on ‘Cloud Computing and Distributed Systems’, organized by Department of Computer Science, Jamia Millia Islamia, N. Delhi, on December 30th, 2016.

(d) Training

- Attended two days Training on “IBM Rational Rose”, organized by JMI on Oct 25-26, 2007.

(e) Orientation/ Refresher Course/ FDP

- Participated in the 84th four-week Orientation Programme organized by the UGC-ASC, Jamia Millia Islamia, New Delhi from 3rd April 2008 to 2nd May, 2008
- Participated in the 11th Refresher Course in Computer Science organized by Academic Staff College, Jawaharlal Nehru University, New Delhi from 10th November 2008 to 05th December 2008
- Participated in the 16th Refresher Course in Computer Science and Information Technology organized by Academic Staff College, Jawaharlal Nehru University, New Delhi from 16th July 2012 to 09th August 2012
- Participated in the AICTE recognized short term course/FDP on “Vulnerability Assessment of Networks & Web Applications” from 29-02-2016 to 05-03-2016 (One week) organized by Bharati Vidyapeeth College of Engg., New Delhi in- collaboration with National Institute of Technical Teachers Training and Research, HRD, Government of India, from 29th February to 05th March 2016.
- Participated in the one-week Professional Development Programme for Teachers organized by the UGC-HRDC, Jamia Millia Islamia, New Delhi from 18th February to 25th February, 2017.

3. Invited Talks

- **Professional Ethics in Information & Communication Technologies (ICT)**, Department of Teacher Training & Non-formal Education, Jamia Millia Islamia, New Delhi-110025, 24th Feb, 2020.
- **Information & Communication Technologies (ICT) in Higher Education**, One Day National Workshop on Information and Communications Technology (ICT) in Higher Education, Organized by Department of Computer Science, Standard College, Kongba, Imphal, Manipur, 19th June, 2021. **(keynote speaker)**
- **Internet of Things: State of The Present Scenario**, Dr. A.P.J. Abdul Kalam Technical University (AKTU), Lucknow sponsored Faculty Development Program, organized at VGI Dadri, Greater Noida on “Internet of Things (IoT)” hosted by Department of Computer Science & Engineering, Vishveshwarya Group of Institutions, Gr. Noida, 13th Nov, 2018. **(keynote speaker)**
- **Cyber Security**, Refresher course on Interdisciplinary Refresher Course in "Information Communication Technology" via ONLINE MODE from 28th January 2023 to 10th February

2023, organized by UGC HRD Centre, Deen Dayal Upadhyay Gorakhpur University, Gorakhpur, UP, 28th January, 2023.

4. Research Supervision

- **Taran Singh Bharati**, Security Enhancement of Mobile Ad-Hoc Networks Using Intrusion Detection System, 2017
- **Vinod Kumar**, Analysis and Design of Cryptographic Algorithms for Secure Group Communication, 2021
- **Subodh Kumar**, Development of a cryptographic model for cyber security applications, 2022
- **Deena Nath Gupta**, Designing of Lightweight Security Scheme for IoT, 2022
- **Arun Kumar Bediya**, Development of Advanced Security Management Techniques for Internet of Things, 2023
- **Krishan Kant Singh Gautam**, Security Issues and Preventive Measures in the Applications of Internet of Things, 2024
- **Raju**, Computational intelligence Based Security for IoT, 2024

5. Research Project

- **Title: "Development and Management of Strategic Security Intelligence Systems for the Internet of Things (IoT)"**

SERB's sanction order No. "EEQ/2018/000118" dated "15 February, 2019 " of Science and Engineering Research Board (SERB). (a statutory body of the Department of Science & Technology, Government of India)

Total cost of Rs. 2579000/- (Rs. Twenty-Five Lakh Seventy-Nine Thousand Only), Duration: 22-February-2019 to 21-February-2022 Three Years

- **Member:** Working Group for drafting the guidelines on "Internet of Things (IoT) Security" under the project "e-Governance Standards and Guidelines", supported by MeitY, GoI
- **Member:** Sub-group under the project "AI based predictive analytics of visitors to public places and its applications for better People Management". Digital Governance Group, MeitY, Government of India

6. Other Administrative/Academic/Research Charges

- **Convener** of Board of Studies (BOS), Dept. of Computer Science, Jamia Millia Islamia.
- **Member** of Organizing Committee of the National Workshop on Software Security (NWSS 2007), Sep 13-14, 2007 organized by Jamia Millia Islamia.
- **Library In-charge**, Departmental Library, Dept. of Computer Science, Jamia Millia Islamia
- **Manuscript Reviewer** of the book entitled "Concepts of Distributed Database Systems", Pearson Education.
- **Manuscript Reviewer** of the book entitled "Learning Database Systems", Pearson Education.

- **Manuscript Reviewer** of the book entitled “C in Easy Words”, Pearson Education.
- **Member** of Sub Purchase Committee, Department of Computer Science, Jamia Millia Islamia.
- **Member** of Training & Placement Committee, Department of Computer Science, Jamia Millia Islamia.
- **Member** of Curriculum Committee, Department of Computer Science, Jamia Millia Islamia
- **Member** of Organizing Committee of the Validation Workshop on Software Security (VWSS 2008), June 21, 2008 organized by Jamia Millia Islamia
- **Convener** of Departmental Meetings, Dept. of Computer Science, Jamia Millia Islamia
- **Coordinator** B. Sc. (Pass) Course.

Date:

(Prof. Rajendra Kumar)