Dr UDAI PRATAP RAO (IEEE Senior Member)
Assistant Professor
Computer Science and Engineering Department
S. V. National Institute of Technology
Ichchhanath, Surat-395007, Gujarat.
Phone: +91-261-2201621 (Office)
E-mail: upr@coed.svnit.ac.in
Date of Joining: 7th August 2007

Qualifications:

PhD (Computer Engineering), February 2014 (SVNIT Surat)

M.Tech. (Computer Science and Engineering), 2006 (RGPV Bhopal)

B.E. (Computer Science and Engineering), 2002 (MJP Rohilkhand Univ. Bareilly)

Research Areas of Interest:

Information Security & Privacy, Privacy in Location-Based Service, Big Data Privacy, Security and Trust Management in Online Social Networks (OSNs), Security and Privacy in Internet of Things (IoT) and Cyber-Physical Systems (CPS), Distributed Computing, Machine Learning

Biography:

Udai Pratap Rao (Senior Member, IEEE) received a PhD in Computer Engineering from Sardar Vallabhbhai National Institute of Technology, Surat (Gujarat), India, in 2014. He has been associated with Sardar Vallabhbhai National Institute of Technology, Surat, in the Department of Computer Science and Engineering since August 2007. His research interests include Information Security & Privacy, Privacy in Location-Based Service, Big Data Privacy, Security and Trust Management in Online Social Networks (OSNs), Security and Privacy in Internet of Things (IoT) and Cyber-Physical Systems (CPSs), Distributed Computing. He has published about 74 papers extensively in journals, book chapters, and refereed conference proceedings. **He has supervised 05 PhD thesis in the fields of data privacy, IoT security, and security and trust management in OSN.** He is currently the **PI** of the research project entitled "Design and Implementation of Secure Service and Attribute-based Authorization Model in Dynamic and Constrained-specific IoT Environment" funded by **IHUB NTIHAC Foundation, IITK, under the aegis of the National Mission on Interdisciplinary Cyber-Physical System (NM-ICPS), Department of Science and Technology, Government of India**. He was the **Principal Investigator (PI)** of the Micro Research project entitled "Investigating Light-Weight Cryptography Algorithms and Its Application to Various IoT Devices" funded by TEQIP-III from July 2019 to Jan 2021. He also acted as the **Chief Investigator** of the "Information Security Education and Awareness Project Phase II" project from July 2018 to Dec 2019, funded by the Ministry of Electronics and Information Technology (MeitY) Govt. of India. He has edited two books, i) **Blockchain for Information Security and Privacy** published by **CRC Press, Taylor and Francis Group** & ii) **Security, Privacy and Data Analytics** published by **Springer in their Lecture Notes in Electrical Engineering book series (LNEE).** He worked as Professor-In-Charge Computing & Networking Facility of the Institute from 08th April 2019 to 8th April 2022. During that period, he provided proper networking infrastructure to the institute, especially during the COVID-19 lockdown migration to the G Suite (Google

Workspace) was the most remarkable initiative that helped the institute to continue its online activities flawlessly. He organised an **International Conference on Security, Privacy, and Data Analytics (ISPDA 2021) at Computer Science and Engineering Department at SVNIT Surat during December 13-15, 2021**. He also organised a **"Privacy in Location-Based Services" workshop in Conjunction WIDECOM 2019 at the University of Milan, Italy, February 11-13, 2019**. He was awarded National Scholarship from 10th standard till graduation given to meritorious students by the Uttar Pradesh state board. He serves as a reviewer of many peer-reviewed journals.

Research Project and Funding:

- PI of a research project entitled "Design and Implementation of Secure Service and Attribute-based Authorization Model in Dynamic and Constrained-specific IoT Environment", funded by **IHUB NTIHAC Foundation, IITK** under the aegis of National Mission on Interdisciplinary Cyber-Physical System **(NM-ICPS)**, Department of Science and Technology, Government of India. Budget: 12.21 Lakhs, Duration: 03 Years. (Ongoing)
- Received grant from **AICTE Training And Learning (ATAL) Academy** to conduct an ONLINE One week FDP on Cyber Threat Intelligence & Digital Forensics (CTIDF) during 19-23 July 2021 vide Sanction No. and Date: 01_/AICTE/ATAL-HQ/2020-21 dated 03-06-2021, Amount: 93,000/-.
- PI of Micro Research project entitled "Investigating Light-Weight Cryptography Algorithms and Its Application to Various IoT Devices" funded by **TEQIP-III**, Budget: 2 lakh, Duration: 1.5 years, Completed in Jan 2021.
- He acted as Chief Investigator of the "Information Security Education and Awareness Project Phase II" project from July 2018 to Dec 2019, funded by the **Ministry of Electronics and Information Technology (MeitY)** Govt. of India. Budget: 63 Lakh (allocated till date).
- PI of project "Implementation of Effective Database Intrusion Detection System (dIDS) to Detect the Insider Attacks", funded by **SVNIT Surat** (under Institute Research Grant), Budget: 9.1 lakh, Duration: 2 years, Completed in June 2016

Patent Filed:

1. A. O. Bang and Udai Pratap Rao, **"System and Method for Securing Large Scale RPL Based IoT Networks," Indian Patent, Application No. 202221009232**, Filed On: 22/02/2022.

2. Udai Pratap Rao, Piyush Kumar Shukla, Ankur Bang, **"SYSTEM AND METHOD FOR SECURING SMART DEVICES"**, **Indian Patent, Application No. 201921052751**, Filed On: 19/12/2019 (Under ISEA-II Project)

Publications in Journals :

1. Ankur O. Bang, **Udai Pratap Rao**, Andrea Visconti, Alessandro Brighente, Mauro Conti, "An IoT Inventory Before Deployment: A Survey on IoT Protocols, Communication Technologies, Vulnerabilities, Attacks, and Future Research Directions"**, Computers & Security, Elsevier 2022.** DOI: https://doi.org/10.1016/j.cose.2022.102914 **(SCI Indexed)**

2. Gordhan B. Jethava, **Udai Pratap Rao**, "A Novel Defense Mechanism to Protect Users from Profile Cloning Attack on Online Social Networks (OSNs)", ***Peer-to-Peer Networking and Applications***, **2022, Springer.** https://doi.org/10.1007/s12083-022-01344-1 **(SCI Indexed)**

3. Ankur O. Bang, **Udai Pratap Rao**, Pallavi Kaliyar and Mauro Conti, "Assessment of Routing Attacks and Mitigation Techniques with RPL Control Messages: A Survey", ***ACM Computing Surveys, 2022,*** 55, 2, Article 44, pp. 1-36. DOI: https://doi.org/10.1145/3494524. **(SCI Indexed)**

4. Gordhan B. Jethava, **Udai Pratap Rao**, "User Behavior-based and Graph-based Hybrid Approach for Detection of Sybil Attack in Online Social Networks", ***Computers and Electrical Engineering, Elsevier***, vol 99, pp. 1-13, 2022. **(SCI Indexed)**

5. Ankur O. Bang, **Udai Pratap Rao,** "Impact Analysis of Rank Attack on RPL-Based 6LoWPAN Networks in Internet of Things and Aftermaths", ***Arabian Journal for Science and Engineering, Springer, 2022***. (Accepted) **(SCI Indexed)**

6. Ankur O. Bang, **Udai Pratap Rao**, "Design and Evaluation of a Novel White-box Encryption Scheme for Resource-constrained IoT Devices", ***Journal of Supercomputing, Springer,*** Vol. 78, pp. 11111–11137, 2022. https://doi.org/10.1007/s11227-022-04322-9 **(SCI Indexed)**

7. Brijesh B. Mehta, **Udai Pratap Rao**, "Improved l-Diversity: Scalable Anonymization Approach for Privacy Preserving Big Data Publishing", ***Journal of King Saud University - Computer and Information Sciences***, Elsevier, Vol. 34, Issue 4, pp. 1423-1430, 2022. **(SCI Indexed)**

8. Gordhan B. Jethava, **Udai Pratap Rao**, "A Novel Trust Prediction Approach for Online Social Networks Based on Multifaceted Feature Similarity", ***Cluster Computing***, Springer, pp. 1-15. https://doi.org/10.1007/s10586-022-03617-z **(SCI Indexed)**

9. Ankur O. Bang, **Udai Pratap Rao**, "EMBOF-RPL: Improved RPL for Early Detection and Isolation of Rank Attack in RPL-Based Internet of Things", ***Peer-to-Peer Networking and Applications***, **2022, Springer,** vol. 15, pp. 642–665**.** https://doi.org/10.1007/s12083-021-01275-3 **(SCI Indexed)**

10. Nikunj Domadiya, **Udai Pratap Rao**, "Elgamal Homomorphic Encryption based Privacy Preserving Association Rule Mining on Horizontally Partitioned Healthcare Data", ***Journal of The Institution of Engineers (India): Series B***, **Springer.** https://doi.org/10.1007/s40031-021-00696-1 **(Scopus Indexed)**

11. Gordhan B. Jethava, **Udai Pratap Rao**, "An Interaction-based and Graph-based Hybrid Approach to Evaluate Trust in Online Social Networks (OSNs)", ***Arabian Journal for Science and Engineering, Springer, 2021***. https://doi.org/10.1007/s13369-021-06332-w **(SCI Indexed)**

12. Nikunj Domadiya, **Udai Pratap Rao**,"Privacy Preserving Association Rule Mining on Distributed Healthcare Data: COVID-19 and Breast Cancer Case Study", ***SN Computer Science, Springer,*** vol. 2, Article number: 418, pp. 1-9, 2021. https://doi.org/10.1007/s42979-021-00801-7 **(Scopus)**

13. A. O. Bang, **Udai Pratap Rao**, "A Novel Decentralized Security Architecture Against Sybil Attack in RPL-based IoT networks: a focus on smart home use case", ***Journal of Supercomputing,*** vol. 77, pp.13703–13738, 2021. https://doi.org/10.1007/s11227-021-03816-2. **(SCI Indexed)**

14. Nikunj Domadiya, **Udai Pratap Rao**, "Improving Healthcare Services using Source Anonymous Scheme with Privacy Preserving Distributed Healthcare Data Collection and Mining", ***Computing***, vol. 103, pp. 155–177, 2021. DOI: https://doi.org/10.1007/s00607-020-00847-0 **(SCI Indexed)**

15. Cristian Lepore, Michela Ceria, Andrea Visconti, **Udai Pratap Rao**, K A Shah, and Luca Zanolini, "Survey on Blockchain Consensus with a Performance Comparison of PoW, PoS and Pure PoS", ***Mathematics***, pp. 1-26, 8(10) 2020. **(SCI Indexed)**

16. Dilay Parmar, Padmaja Joshi, **Udai Pratap Rao**, A. Sathish Kumar, Ashwin Nivangune, "A Discovery and Selection Protocol for Decentralized Cloudlet Systems ", ***International Journal of Cloud Computing,*** Inderscience Publishers, 2020. **Accepted for publication (Scopus)**

17. Ruchika Gupta, **Udai Pratap Rao**, "Preserving Location Privacy using Three Layer RDV Masking in Geocoded Published Discrete Point Data", ***World Wide Web***, Vol 23. No. 1, pp. 175-206, Springer, 2020. DOI: https://doi.org/10.1007/s11280-019-00716-7 **(SCI Indexed)**

18. Ruchika Gupta, **Udai Pratap Rao**, " VIC-PRO: VICinity PROtection by concealing Location Coordinates using Geometrical Transformations in Location Based Services", ***Wireless Personal Communications***, Volume 107, no. 2, pp.1041–1059, Springer, July 2019. URL: https://rdcu.be/bxeet **(SCI Indexed)**

19. Brijesh B. Mehta, **Udai Pratap Rao**, Ruchika Gupta, and Mauro Conti, "Towards privacy preserving unstructured big data publishing", ***Journal of Intelligent and Fuzzy Systems***, vol. 36, no. 4, pp. 3471-3482, 2019. **(SCI Indexed)**

20. Nikunj Domadiya, **Udai Pratap Rao**, "Privacy Preserving Distributed Association Rule Mining Approach on Vertically Partitioned Healthcare Data." ***Procedia computer science***, vol. 148, 2019, pp. 303-312. **(Scopus)**

21. **Udai Pratap Rao**, Brijesh B. Mehta, Nikhil Kumar, "Scalable l-Diversity: An Extension to Scalable k-Anonymity for Privacy Preserving Big Data Publishing", ***International Journal of Information Technology and Web Engineering (IJITWE) 14(2)***, pp. 27-40, 2019. **(Scopus)**

22. Nikunj Domadiya and **Udai Pratap Rao**, "Privacy Preserving Association Rule Mining for Horizontally Partitioned Health Care Data : A Case Study on the Heart Diseases", **Sādhanā** (2018) 43: 127 , Springer, pp. 1-9. URL: https://rdcu.be/2ceR **(SCI Indexed)**

23. Brijesh B Mehta, **Udai Pratap Rao**, "Privacy Preserving Big Data Publishing: A Scalable k-Anonymization Approach using MapReduce", ***IET Software,*** Volume 11, Issue 5, 2017, pp. 271 – 276. **(SCI Indexed)**

24. Ruchika Gupta, **Udai Pratap Rao**, "An Exploration to Location Based Service and Its Privacy Preserving Techniques: A Survey", ***Wireless Personal Communications***, Springer, Volume 96, no. 2, 2017, pp. 1973-2017. **(SCI Indexed)**

25. Ruchika Gupta, **Udai Pratap Rao**, "Achieving Location Privacy through CAST in Location Based Services", ***Journal of Communications and Networks,*** IEEE ComSoc, vol. 19, no. 3, 2017, pp. 239-249. **(SCI Indexed)**

26. Ruchika Gupta and **Udai Pratap Rao**, "A Hybrid Location Privacy Solution for Mobile LBS", **Mobile Information Systems**, vol. 2017, Article ID 2189646, 2017, pp. 1-11. doi:10.1155/2017/2189646. **(SCI Indexed)**

27. **Udai Pratap Rao**, Nikhil Kumar Singh, "Weighted Role Based Data Dependency Approach for Intrusion

Detection in Database", *International Journal of Network Security*, Vol.19, No.3, pp.358-370, 2017. **(Scopus)**

28. B. Mehta, **U. P. Rao**, "Privacy Preserving Unstructured Big Data Analytics: Issues and Challenges," **Procedia Computer Science**, vol. 78, 2015. (Scopus)

29. **Udai Pratap Rao**, Dhiren R. Patel, "Incorporation of Application Specific Information for Recovery in Database from Malicious Transaction", *Information Security Journal: A Global Perspective, Taylor & Francis*, Vol. 22, No. 1, pp. 35-45, 2013. **(Scopus)**

30. **Udai Pratap Rao**, Dhiren R. Patel, "Design and Implementation of Database Intrusion Detection System for Security in Database", *International Journal of Computer Applications*, Volume 35 - Number 9, pp. 32-40, 2011.

31. **Udai Pratap Rao**, G. J. Sahani, Dhiren R. Patel, "Detection of Malicious Activity in Role Based Access Control (RBAC) Enabled Databases", *International Journal of Information Assurance and Security*, pp. 611-617, Volume 5, Issue 6, USA, ISSN 1554-1010,2010. **(ESCI)**

32. **Udai Pratap Rao**, G. J. Sahani, Dhiren R. Patel, "Clustering Based Approach for Database Intrusion Detection in Role Based Access Control (RBAC) Enabled Databases", *International Journal of Computer and Network Security*, pp. 71-74, Vol.2, No.6, June 2010.

33. Chirag N. Modi, **Udai Pratap Rao**, Dhiren R. Patel, "An Efficient Solution for Privacy Preserving Association Rule Mining using Unknowns", *International Journal of Computer and Network Security*, pp. 79-85, Vol.2, No.5, May 2010.

34. Parag dave and **Udai Pratap Rao**, "A Review of Content Extraction" *IETE Journal of Education*, ISSN: 0970-1664, Volume 50, No. 1, pp. 37-47, Jan-Apr 2009.

Publications in Conferences:

35. Suryansh Raj Singh, Harsh Mithaiwala, Nirav Chauhan, Parth Shah, Chandan Trivedi, and Udai Pratap Rao, "Decentralized Blockchain-Based Framework for Securing Review System", In the proceedings of *International Conference on Security, Privacy, and Data Analytics (ISPDA 2021)*, Springer, pp. 239-255, 2022.

36. Nishtha Srivastava, Ashish Chaudhari, Nidhi Joraviya, Bhavesh N. Gohil, Suprio Ray, and Udai Pratap Rao, "A Review of Machine Learning-Based Intrusion Detection System on the Cloud", In the proceedings of *International Conference on Security, Privacy, and Data Analytics (ISPDA 2021),* Springer, pp. 303-317, 2022.

37. Ankur Bang, Udai Pratap Rao, Pethuru Raj and Alok Kumar, "White-Box Encryption Scheme for Resource-constrained IoT Devices", In the proceedings of *International Conference on Security, Privacy, and Data Analytics (ISPDA 2021),* Springer, pp. 257-268, 2022.

38. A. O. Bang and Udai Pratap Rao, "Context-aware computing for IoT: History, Applications and Research Challenges," In the proceedings of *Second International Conference on Smart Energy and Communication*, Springer, 2021, pp. 719–726.

39. Parmar, Dilay, Udai Pratap Rao, "Towards Privacy-Preserving Dummy Generation in Location-Based Services" In the proceedings of *Elsevier 3rd International Conference on Computing and Network Communications (CoCoNet'19), Procedia Computer Science*, Vol. 171, pp. 1323-1326, 2020.

40. Dilay Parmar, Udai Pratap Rao, "Dummy Generation-Based Privacy Preservation for Location-Based Services", In the proceedings of *21st International Conference on Distributed Computing and Networking (ICDCN 2020)*, Kolkata, India, January 4-7, 2020. ACM, p. 1, 2020.

41. Brijesh B. Mehta, Ruchika Gupta, Udai Pratap Rao, Mukesh Muthiyan, "A Scalable (alpha, k)-Anonymization Approach using MapReduce for Privacy Preserving Big Data Publishing", In the proceedings of *10th International Conference on Computing, Communication and Networking Technologies (ICCCNT)*, 6th -8th July 2019, IIT Kanpur, pp. 1-6, 2019.

42. Rishipal Yadav, Udai Pratap Rao, Dilay Parmar, Sumedh Nimkarde and Gaurav Jat, "Preserving Location Privacy Using Blockchain", *In the proceedings of the International Conference Blockchain Technology (IC-BCT 2019)*, pp. 1-5, 2020.

43. Vaibhav Agrawal, Aishwarya Agarwal, Shailja Shah, Dilay Parmar and Udai Pratap Rao, "Decentralised Ecosystem for Journalism based on Blockchain", *In the proceedings of the International Conference Blockchain Technology (IC-BCT 2019)*, pp. 7-19, 2020.

44. Sravan Kumar Gadekula and Udai Pratap Rao, "Improved Pearson Similarity for Collaborative Filtering Recommendation System", In the proceedings of *13th INDIACom; 2019 6th International Conference on Computing for Sustainable Global Development*, 13th – 15th March, IEEE, 2019, pp. 1047-1054.

45. N. H. Domadiya, U. P. Rao, "Privacy Preserving Approach for Association Rule Mining in Horizontally Partitioned Data using MFI and Shamir's Secret Sharing," *13th International Conference on Industrial and Information Systems (ICIIS 2018)*, IIT Ropar, IEEE,2018, pp. 217-222.

46. Ruchika Gupta, Udai Pratap Rao, "Privacy Protection through Hiding Location Coordinates using Geometric Transformation Techniques in Location Based Services enabled Mobiles" *In the proceedings of 50th Annual Convention of Computer Society of India (CSI), Cyber Security, Advances in Intelligent Systems and Computing*, Springer, vol 729, 2018, pp. 1-10. Springer.

47. Ruchika Gupta, Udai Pratap Rao, and Manish Kumar. "Perturbed Anonymization: Two Level Smart Privacy for LBS Mobile Users", **4th International Conference on Cryptography and Information Security (CRIS 2018),** *Computer Science & Information Technology*, Feb 24-25, pp. 69-79, 2018.

48. Brijesh B Mehta, Udai Pratap Rao, "Towards Scalable Anonymization for Privacy Preserving Big Data Publishing", In the proceedings of *5th International Conference on Advanced Computing, Networking, and Informatiics (ICACNI-2017)*, Recent Findings in Intelligent Computing Techniques. Advances in Intelligent Systems and Computing, vol 708 Springer, PP. 297-304, 2018.

49. Brijesh B Mehta, Udai Pratap Rao, Nikhil Kumar, and Sravan Kumar Gadekula, "Towards Privacy Preserving Big Data Analytics", In the proceedings of *Sixth International Conference on Advanced Computing & Communication Technologies (ACCT-2016)*, Research Publishing, pp. 28-35, Sept. 2016. ISBN: 978-981-11-0783-2, doi:10.3850/978-981-11-0783-2 390.

50. Dilay Parmar, A. Sathish Kumar, Ashwin Nivangune, Padmaja Joshi, and Udai Pratap Rao, "Discovery and Selection Mechanism of Cloudlets in a Decentralized MCC environment", In the proceedings of *third IEEE/ACM International Conference on Mobile Software Engineering and Systems (MOBILESoft 2016)*, ACM, Austin (TX), USA, 2016.

51. Litun Patra, Udai Pratap Rao, "Internet of Things – Architecture, Applications, Security and other Major Challenges", In the proceedings of *10th INDIACom; 2016 3rd International Conference on Computing for Sustainable Global Development*, March, pp. 1894- 1899, IEEE, 2016.

52. B. Mehta, U. P. Rao, "Privacy Preserving Unstructured Big Data Analytics: Issues and Challenges," In the proceedings of *First International Conference on Information Security and Privacy(ICISP)*, Nagpur, India, vol. 78, Elsevier Procedia Computer Science, Dec. 2015.

53. Domadiya Nikunjkumar H., Udai Pratap Rao, "A Hybrid Technique for Hiding Sensitive Association Rules and Maintaining Database Quality", In the proceedings of *International conference on ICT for intelligence system (ICTIS)*, Smart Innovation, Systems and Technologies Series, Springer, Ahmedabad, India, vol. 2, pp. 359-367, Nov 2015.

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56. Udai Pratap Rao, Nikhil Kumar Singh, Akash R. Amin, Kushal Sahu, "Enhancing Detection Rate in Database Intrusion Detection System", In the proceedings of *Science and Information Conference 2014*, IEEE, London, pp. 556-563, 2014.

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Business Administration and Information Processing (BAIP 2010) *Trivandrum, Kerala*,   pp. 538–544, **LNCS-CCIS series, Springer- Verlag Berlin Heidelberg 2010**, ISBN 978-642-12213-2.

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Edited/ Authored Books:

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80. SVD Based Database Watermarking for Security in Database, published by *LAMBERT Academic Publishing (LAP),* ISBN 978-3-8465-2410-7, Oct. 2011.

Book Chapters:

81. Ruchika Gupta, Udai Pratap Rao, "Investigating and Devising Privacy Preserving Approaches for Location-Based Services", *Intelligent Technologies: Concepts, Applications, and Future Directions. Studies in Computational Intelligence*, vol 1028, 2022, *Springer*. https://doi.org/10.1007/978-981-19-1021-0_6

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Ph.D. Supervision:

Completed:

1. Mr. G. B. Jethava (D18CO004) - Security and Trust Management Approaches for Online Social Networks (October 2022)

2. Mr. Ankur O. Bang (D18CO001)- Investigating and Devising Security Solutions for Resource Constraint IoT Devices Operating on 6LoWPAN Protocol Stack (July 2022)

3. Mr. Nikunj Domadiya (DS14CO004)- Privacy Preserving Association Rule Mining Approaches for Distributed Healthcare Data (June 2020)

4. Mr. Brijesh Mehta (D14CO002)- Scalable Anonymization Approaches for Privacy Preserving Big Data Publishing (April 2019)

5. Ms. Ruchika Gupta (D14CO003)- Investigating and Devising Privacy Preserving Approaches for Location Based Services (May 2018)

On going:

1. Mr. Parmar Dilay Amarbhai (DS17CO001)- Privacy in Location Based Services

2. Mr. Chandan Trivedi (D19CO001)- Authentication mechanism in IoT

3. Mr. Akhil Chaurasia (D19CO002)- Security & Privacy

4. Mr. Ashish Choudhary- Security issues in cloud computing **(Co-Supervisor)**

5. Ms. Nidhi Joraviya (D20CO002)- Container Security

6. Mr. Sujoy Roy (D21CO003)- Security and Privacy in IoT/CPS

7. Mr. Rajiv Kumar (D22CS001)- Machine Learning

M. Tech Dissertation Supervision:

2020-21

1. Image Haze Removal using a Combined Noise Removal Filter and Deep Learning- Mr. Rahul Panchal (P19CO011)

2. GATS Tool to Automate Stress and Stability Test Suite- Mr. Sachin Choudhary (P19CO010) (jointly Mr. Sivaprakash K M, Intel Banglore)

2019-20

3. Deep Learning Hardware Accelerator Engine - Mr. Akshay A. Ashtunkar (P18CO004) (jointly Mr. Anshuman Gaurav, Intel Banglore)

4. An Approach for Mining of Attribute Based Access Control Policies- Ms. Sheetal Bairagi (P18CO015)

2018-19

5. Design And Analysis of Hilbert Curve Based Privacy Preserving Approach in Federated Cloud Environment- Mr. Varimadugu Srinivasula Reddy (P17CO007)

6. Use SharePoint Platform to Create Web Portal and Build Reports using Multidimensional Model- Ms. Suchita Bajaj (P17CO002) (jointly MAQ Software Mumbai, Mrs. Megha Desai)

2017-18

7. Secure Criss-Cross Location Based Service in Logistics- Ms. Gargi Baser (P16CO017)

8. Development of Automation Tools For Validation And Enhancement of Intel's Display Audio Driver- Mr. Rohit Kumar (P16CO001) (jointly Intel, Bangalore, Ms. Meenakshi Pannala)

2016-17

9. Improved Pearson Similarity for Collaborative Filtering Recommendation System using Mahout- Mr. Gadekula Sravan Kumar (P15 CO004)

10. Privacy Preserving Big Data Publishing using k-anonymity and l-diversity- Mr. Nikhil Kumar (P15 CO009)

11. Low Cost Big Data Analytic Solution for PMT- Ms. Naik Shruti Chetanbhai (P15 CO006) (jointly Philips Innovation Campus, Bangalore, Mr Sharath Kalyan)

12. Big Data Security Framework for Secure Data Storage and Sharing- Mr. Laxman Didwal (P15 CO016)

2015-16

13. Design and Implementation of Communication Protocols for Decentralized Cloudlet Environment- Mr. Dilay A. Parmar (P14 CO 019) (jointly C-DAC Mumbai, Dr. Padmaja Joshi)

14. Behaviour Analysis in Video Surveillance Systems- Mr. Patel Shreyaskumar Naranbhai (P14CO018) (jointly C-DAC Mumbai, Dr. Urjaswala Vora)

15. Controlling Access to eHealth Data Efficiently Using Request Denial Cache in XACML Reference Architecture for ABAC- Mr. Litun Patra (P14CO005)

16. Utility Improving Anonymity for Sequential Data Publishing- Mr. Malaviya Jayesh Vallabhbhai (P14CO006)

2014-15

17. Investigating Privacy Preserving Mechanism For Location Based Services- Mr. Manish Kumar (P13CO005)

18. Detection And Prevention Of Anomalous Queries In Database- Mr. Methuku Sunil Kumar (P13CO013)

2013-14

19. Weighted Role Based Intrusion Detection in Databases- Mr. Nikhil Kumar Singh (P12CO009)

20. A Novel Framework for Privacy Preserving in Location Based Services- Mr. Harshal Girme (P12CO008)

21. Finding Global Frequent Itemsets For Secure Mining of Association Rules In Horizontally Partitioned Databases Using Randomized Addition Technique- Mr. Arpesh Kumar (P12CO005)

22. An Anonymization Approach For Re-Publication of Fully Dynamic Datasets- Mr. Akhileash kumar Singh (P12CO010)

2012-13

23. Efficient Approaches for Preserving Privacy in Association Rule Mining- Mr. Domadiya Nikunjkumar H.(P11CO002)

24. Improving Accuracy of Database Instruction Detection System by Including Details of Attribute Access Patterns- Mr. KUSHAL SAHU (P11CO015)

25. Detection of Malicious Activities in RBAC-Administered Database- Mr. Pandavkumar K. Patel (P11CO003)

26. Reducing False Positives in anomaly based Detection of Malicious Activities in Database- Mr. Amin Akash Rajeshkumar (P11CO018)

2011-12

27. Privacy Preservation of Association Rule Mining in Unsecured Distributed Database using Cryptography- Mr. Ashish Patel (P10CO985)

28. Watermarking Relational Database for Ownership Protection – Mr. Vikani Punitkumar (P10CO954)

29. Recovery in Database from Malicious Transactions- Mr. Dilip Kumar (P10CO983)

30. Implementation of Database Intrusion Detection Mechanism- Mr. Jay Kant Pratap Singh Yadav (P10CO997)

2010-11

31. Multi-place Database Watermarking for Security in Database- Mr. Mehta Brijesh (P09CO970)

32. SVD Based Database Watermarking - Mr. Vidhya Goutham (P09CO976)

33. Privacy Preserving Using Classification Rule Hiding- Ms. Parmar Anita (P09CO982)

34. Network Intrusion Detection by Two-Objective Fuzzy Genetic Algorithms – Ms. Agravat Madhuri (P09CO961)

35. Multi-dimensional and Multi-level Data Dependency with Attribute Sensitivity for Database Intrusion Detection-Mr. Indre Jeet Rajput (P09CO964)

36. Design and Implementation of Privacy Preserving Clustering Algorithm Based on Shamir's Secret Sharing - Ms. Garasia Sweta (P09CO957) (jointly Dr. Sankita Patel, SVNIT Surat)

   2009-10

37. Efficient Approaches for Privacy Preserving Association Rule Mining in Different Environments – Mr. Chirag Modi (P08CO956)

38. Database Intrusion Detection Using Auditing and Transaction Profiling Mechanisms – Mr. G.B. Jethwa (P08CO976)

39. Database Intrusion Detection in Role Based Access Control (RBAC) Enabled Databases- Mr. G. J. Sahani (P08CO978)

40. Workflow Automation System- Mr. Ramashankar Bhawre (P08CO964)

   2008-09

41. Delete My Track : Rolling Back the Status of Hard Drive –Shanavaz Meman (P07CO954)

M Tech (Research) Supervision:

1. Multi-Level Processing of Text for Information Retrieval- Mr. Parag Dave (R08CO951)

B. Tech Project Supervision:

Sl. No.	Title of Dissertation/Project	Department/ Institute		Co-Supervisor[s], if any	Year
1.	Blockchain- based Document Management System	Computer Science and Engineering	SVNIT Surat		2022
2.	Automatic Response Generation for Amazon QA Dataset	Computer Science and Engineering	SVNIT Surat		2022
3.	Twitter Sentiment Analysis using different Machine Learning Techniques	Computer Science and Engineering	SVNIT Surat		2022
4.	Blockchain-Based Decentralized Review System	Computer Engineering	SVNIT Surat		2021
5.	Prediction of Death Rate and Recovery Rate due to COVID-19	Computer Engineering	SVNIT Surat		2021
6.	Sentiment Analysis on Twitter	Computer Engineering	SVNIT Surat		2021
7.	Elliptic Curve White-box Cryptography and its Application in Weather Monitoring IoT	Computer Engineering	SVNIT Surat		2020
8.	A New Ecosystem for Digital Identity Verification using	Computer Engineering	SVNIT Surat		2020

	Blockchain				
9.	A Combination of Steganography and Cryptography for Medical Data Confidentiality	Computer Engineering	SVNIT Surat		2020
10.	Comparative Analysis of Lightweight Cryptographic Block Ciphers	Computer Engineering	SVNIT Surat		2020
11.	Blockchain in Journalism	Computer Engineering	SVNIT Surat		2019
12.	Preserving Location Privacy using Blockchain	Computer Engineering	SVNIT Surat		2019
13.	Privacy Preservation Big Data Publishing	Computer Engineering	SVNIT Surat		2019
14.	Github Recommendation System	Computer Engineering	SVNIT Surat		2019
15.	Hadoop As a Service (HAAS)	Computer Engineering	SVNIT Surat		2019
16.	Experimental study of different algorithms for big data privacy	Computer Engineering	SVNIT Surat		2018
17.	Sentiment Analysis of Twitter Data by Comparing Against various Algorithms	Computer Engineering	SVNIT Surat		2018
18.	Attendance Management system using Access Controls	Computer Engineering	SVNIT Surat		2018
19.	Role identification and ranking system using GITHUB	Computer Engineering	SVNIT Surat		2018
20.	Study of Big Data Indexing Techniques	Computer Engineering	SVNIT Surat		2017
21.	Mood Based Music Recommendation System	Computer Engineering	SVNIT Surat		2017
22.	Implementation of Mondrain Algorithm for Privacy Preserving in Big Data Publishing	Computer Engineering	SVNIT Surat		2017
23.	Implementation of Web Based recommendation Systems	Computer Engineering	SVNIT Surat		2016
24.	Anomaly Based Network Intrusion Detection System	Computer Engineering	SVNIT Surat		2016
25.	A novel Solution for Maintaining privacy in Location Based Services	Computer Engineering	SVNIT Surat		2015
26.	Stock Market Prediction Using Twitter API	Computer Engineering	SVNIT Surat		2014
27.	XOTP: Mitigating Emerging Man-in-the-Middle Attacks with Wireless Hardware Tockens	Computer Engineering	SVNIT Surat		2014
28.	Mitigating of Jelly Fish Attack on MANET	Computer Engineering	SVNIT Surat		2014
29.	Implementation of Database Watermarking Technique	Computer Engineering	SVNIT Surat		2011
30.	Database Intrusion Detection	Computer Engineering	SVNIT Surat		2010

31.	Network Intrusion Detection System	Computer Engineering	SVNIT Surat		2010
32.	Enterprise Resource Planning	Computer Engineering	SVNIT Surat		2010
33.	Data Mining in Retail Industry	Computer Engineering	SVNIT Surat		2009
34.	Data Mining in Banking Application	Computer Engineering	SVNIT Surat		2009
35.	Functional Testing Framework for Open Social Applications	Computer Engineering	SVNIT Surat		2009

Conducted Conference/ Workshop / Seminars for Faculty / Industry People:

Sr. No.	Title	Duration	Coordinators
1.	International Conference on **Security, Privacy, and Data Analytics (ISPDA 2021)** at Computer Science and Engineering Department at SVNIT Surat	December 13-15, 2021	
2.	**ATAL FDP on Cyber Threat Intelligence and Digital Forensics** (CTIDF 2021) at Computer Engineering Department, SVNIT Surat	July 19-23, 2021	
3.	TEQIP-III sponsored STTP on **"Cyber Threat Intelligence and Digital Forensics (CIDF-2021)"** at Computer Engineering Department, SVNIT Surat.	Mar 01-05, 2021	
4.	TEQIP-III sponsored STTP on **"Blockchain Technology and Its Applications in Internet of Things (BTIoT-2020)"** at Computer Engineering Department, SVNIT Surat.	Dec 7-11, 2020	
5.	TEQIP-III sponsored STTP on **"Data Security and Privacy (DSP 2020)"** jointly organized by Computer Enginerring Deartment, SVNIT Surat & Computer Science and Engineering Department, MMMUT Gorakhpur.	Oct 23-27, 2020	
6.	ISEA-II sponsored one day workshop on **"Cyber Crime and Digital Forensics (CCDF 2019**", at Computer Engineering Department, SVNIT Surat	Nov 23, 2019	
7.	TEQIP-III sponsored STTP on **"Data Analytics and IoT (DAIoT- 2019)** at Computer Science and Engineering Department, MMMUT Gorakhpur **(as Co-Coordinator)**	Nov 4-8, 2019	
8.	TEQIP-III sponsored STTP on "**Big Data and IoT: Data Analytics, Security & Privacy (BIGIOT2018)**" at Computer Engineering Department, SVNIT Surat	June 24 –28, 2019	
9.	Workshop on **"Privacy in Location-Based Services"** in Conjunction with **International Conference on Wireless, Intelligent, and Distributed Environment for COMmunication (WIDECOM 2019), University of Milan, Italy**, February 11-13, 2019	February 11-13, 2019	
10.	QIP Short Term Course on **"Advances in Big Data Analytics"** at Computer Engineering Department, SVNIT Surat	December 12-16, 2016	
11.	TEQIP-II Sponsored STTP on **"Big Data and Hadoop (BDH 2016)"** at Computer Engineering Department, SVNIT Surat **(as Co-Coordinator)**	October 24-28, 2016	
12.	TEQIP-II Sponsored STTP on **"Big Data Analytics (BDA 2016)"** at Computer Engineering Department, SVNIT Surat	27th June- 01st July 2016	

13.	TEQIP-II Sponsored STTP on **"Big Data and Advanced Video Compression"** at Computer Engineering Department, SVNIT Surat	29th June - 3rd July, 2015	
14.	TEQIP-II Sponsored STTP on **"Data Mining: Security and Privacy Issues"** at Computer Engineering Department, SVNIT Surat	June 23-27, 2014	
15.	STTP on **"Computer Architecture"** at Computer Engineering Department, SVNIT Surat	December 21-25, 2009	

Seminar / Workshop/ Short term courses/schools/conferences attended:

Sr. No.	Title and Venue	Duration
1.	Participated in 3rd Conference on Computational Thinking in Schools, Pune (Virtual Event)	29th September to 2nd October, 2021
2.	Completed 08 weeks (June- July 2020) Coursera online course on Blockchain Basics (Grade Achieved: 95.78%).	June- July 2020
3.	Completed 12 weeks (Jan- April 2020) NPTEL online certification course on Cryptography and Network Security	Jan- April 2020
4.	Webinar: Webex Meeting on Protecting privacy in cyberspace organized ISEA. Speaker: Dr. Karnika Seth	May 30, 2020
5.	ACM India Industry Webinar: "AI for India and Beyond" by Speaker Dr. Manish Gupta, Director, Google Research India	May 23, 2020
6.	ACM-India Annual Event 2020 at IIT Gandhinagar	Feb 15, 2020
7.	National Workshop On Cyber Security: Current Trends and Future Perspective (CSCTFP) at National Institute of Technology, Kurukshetra	March 1-3, 2017
8.	Three days Intensive Hindi Training Workshop at SVNIT Surat.	May 23-25, 2016
9.	TEQIP-II sponsored one day workshop on "Outcome Based Education(OBE)" at MED, SVNIT Surat	Feb. 24, 2016
10.	Attended two days 5th IEEE International Conference on Advanced Computing & Communication Technologies (ACCT- 2015)	Feb 21-22, 2015
11.	Attended three days Science and Information Conference 2014 at London.	August 27-29, 2014
12.	One day seminar on "Good Governance" under TEQIP-II and organized by SVNIT Surat.	September 9, 2014
13.	Four days STTP on "Cloud Computing" under TEQIP-II and organized by Computer Engineering Department, SVNIT Surat.	March 10-13, 2014
14.	Two days workshop on "Objective & Outcome Based Education" under TEQIP-II and organized by SVNIT Surat.	December 21-22, 2013
15.	One week STTP on "Hardening Cyber Security" under TEQIP-II and	June 10-14, 2013

	organized by Computer Engineering Department, SVNIT Surat.	
16.	One week Pedagogy Training Programme on "Developing Teachers for Effective Teaching & Research" under TEQIP-II and organized by SVNIT Surat.	June 3-7, 2013
17.	Three days Symposium on Security and Privacy at Computer Science and Engineering Department at IIT Kanpur.	Feb. 28- March 2, 2013
18.	Two-day ISTE Workshop on "Aakash for Education" conducted by IIT Bombay.	Nov. 10-11, 2012
19.	One week programme on "Condensed Transalation Training Course Certificate" organized by Central Translation Bureau, Department of Official Language, Ministry of Home Affairs at SVNIT surat India.	Nov. 26-30, 2012
20.	One week IFIP WG11.11- 6thInternational Conference on Trust Management at Computer Engineering Department at NIT Surat, India.	May 21-25, 2012
21.	One week IFIP WG11.11-ISEAP Sponsored International Winter School on Trust Management in ICT at Computer Engineering Department at NIT Surat, India.	February 6-10, 2012
22.	Two days National Workshop on Natural Energy Conservation and Use at SVNIT during	September 29-30, 2011.
23.	STTP on Analysis and Design of Algorithms at SVNIT Surat	January 4-8, 2010.
24.	AICTE/ISEA Sponsored STTP on Advances in Data Structure during 14-18, December 2009 at SVNIT Surat.	December 14-18, 2009
25.	One day Workshop on "Biometric Authentication" at C-DAC Mumbai	November 18, 2009
26.	CRSI 9th National Workshop on Cryptology at SVNIT Surat.	August 7-9, 2009
27.	One Week Indo US collaboration for engineering education (IUCEE)-2009 at Infosys, Mysore Karnataka.	July 6-10 ,2009
28.	AICTE/ISEA Sponsored STTP on Cyber Security at SVNIT Surat.	January 19-23, 2009
29.	One Week Staff Development Programme on Machine Learning & Soft Computing Techniques (MLSC 2008) at SVNIT Surat.	December 29 – January 2, 2009
30.	STTP on Advanced Engineering Optimization through Intelligent Techniques at SVNIT Surat.	December. 22-26,2008
31.	Training Program on Multi-Criteria Decision Making and its Industrial Applications during at SVNIT Surat.	October. 4-5,2008
32.	STTP on Computer Vision and Image Processing at SVNIT Surat	July 7-11, 2008
33.	Staff Development Program on Curriculum Enhancement In Design Of Embedded Systems And Its Applications at NIT Allahabad	June 16 – June 27, 2008.
34.	Research Methodology Training Program at SardarVallabhbhai National Institute of Technology, Surat (organized by EQUATE New Delhi)	May 16-17, 2008.
35.	Pedagogy (teaching methodology) Training Program at SardarVallabhbhai National Institute of Technology, Surat (organized	May 12-15, 2008.

	by EQUATE New Delhi	
36.	Training Program on CDEEP (Centre for Distance Engineering Education Program) & EDUSAT IIT Bombay.	January 19-20, 2008
37.	Induction Training Program at SardarVallabhbhai National Institute of Technology, Surat (organized by EQUATE New Delhi)	January 15-17, 2008.
38.	National Seminar : Engineering of Software Products : Requirements To Deleverables NIT Durgapur	January. 9-11, 2008

Expert Lectures and Keynote addresses:

Sr. No.	Title	Name of programme/course
1.	Security architecture against Sybil attack in RPL-based IoT networks	AICTE-GTU sponsord FDP on Recent Trends and Future Directions in Information Security organized by L. D. College of Engineering Ahmedabad (Gujarat) during 21-26 March 2022. (on 25th March 2022)
2.	Cyber security threats and preventive measures	ATAL FDP on Cyber Threat Intelligence and Digital Forensics organized by the Department of Computer Science and Engineering, SVNIT Surat during July 19-23, 2021. (on 21 July 2021)
3.	Mathematical Background of Lightweight Cryptography	ATAL sponsored one week FDP on Recent Advances and Trends in Lightweight Cryptography for IoT Security and Blockchain Technologies during 27-31 July 2021 at the Department of CSE, UIT-RGPV, Bhopal (on 30th July 2021)
4.	Mathematics of Cryptography	TEQIP-III Sponsored One Week Online Faculty Development Program on Modern Cryptography, Blockchain & IoT Security: Challenges, Solution & Future Prospects-*MCB-IoTs-2021" during 22-26 March 2021 at Department of CSE, UIT-RGPV, Bhopal (on 26 march 2021)
5.	Cyber Security Threats and Preventive Measures	Five days FDP on Emerging Trends in Cyber Securities and Hands-On from 16-20 March 2021 at NRI Institute of Research and Technology Bhopal. (on 16th March 2021)
6.	Mathematical Background on Cryptography	Six days AICTE sponsored STTP on Cyber Security and Forensics from 21st to 26th Dec 2020 at Sri Aurobindo Institute of Technology, Indore. (on 23rd Dec 2020)
7.	Privacy Preserving Methods for Location-based Services	GUJCOST sponsored online STTP on Cyber Security and Blockchain Technologies during 14th to 19th Dec 2020 at VVP Engineering College, Rajkot, Gujarat. (on 16th Dec 2020)
8.	Data Privacy Anonymization Techniques	AICTE sponsored STTP on Cyber Security - Current Trends and Future Perspective during 14-19 Dec 2020, at Guru Nanak Dev Engineering College, Ludhiana (on 15th Dec 2020)
9.	Privacy Issues in LBS	AICTE sponsored STTP on Cyber Security - Current Trends and Future Perspective during

		9-14 Nov 2020, at Guru Nanak Dev Engineering College, Ludhiana (on 12th Nov 2020)
10.	Introduction to Cyber Security	ATAL 5 days online FDP on "Cyber Security" 24/08/2020 to 28/08/2020 Oriental institute of science and technology Bhopal (on 24th August 2020)
11.	Common Security Attacks and Countermeasures & Privacy in Location-based Services	AICTE Sponsored Online Short Term Training program from 24th to 29th August 2020 at Sri Aurobindo Institute of Technology, Indore. (on 24th and 25th August 2020)
12.	Big data analytics: concepts and methods	RTU TEQIP-III sponsored Faculty Development Programme on "Data Analytic Techniques for Research & Their Advancements" 17/08/2020 to 19/08/2020 (on 19th August 2020)
13.	Cyber Securty	Talk at Charusat University on 22nd May 2020 (3-4pm)- Webinar on Cyber Security during Online Workshop on Raising Trents In Computer Science
14.	Cyber Securty	On occasion of foundation day celibration of Indian Institution of Industrial Engineering (IIIE) at SVNIT Surat. (on 5th Feb 2020)
15.	Data Privacy	AICTE Sponsored Two Week Faculty Development Program on **Recent Developments in Next Generation Networks** (NGN), 18-19 Nov 2019 at LNCT Bhopal. (on 29th Nov 2019)
16.	Data Privacy: Approaches and State of the Art	At Auro University, Surat, Gujarat (on 22 Nov 2019)
17.	Privacy by Design: Approaches and State of the Art	TEQIP-III sponsored STTP on **"Data Analytics and IoT (DAioT- 2019)** at Computer Science and Engineering Department, MMMUT Gorakhpur. (on 8th Nov 2019)
18.	Privacy Concerns in Location-based Services	MALAVIYA RESEARCH CONCLAVE (MRC-2019)" during Feb. 24-26, 2019 at Madan Mohan Malaviya University of Technology Gorakhpur. (on 26th Feb 2019)
19.	Research Topics in Security & Privacy	MALAVIYA RESEARCH CONCLAVE (MRC-2019)" during Feb. 24-26, 2019 at Madan Mohan Malaviya University of Technology Gorakhpur. (25th Feb 2019)
20.	Recent Research Topics in Field of Data Privacy	CGPIT, Uka Tarsadia University, Bardoli, Surat, Gujarat (on 29th Dec 2018)
21.	Privacy Requirements in Location Based Services	ISEAP - II Sponsored Five-Days FDP on Research Topics in Information Security and Privacy (RTIS&P 2018), Jun 18-22, 2018 at SVNIT Surat (on 19th June 2018)
22.	Big Data Computation	At Electronics Engineering Department, SVNIT Surat during celebration of IETE foundation day. (on 11th November 2017)
23.	Data Mining	At Computer Engineering Department, Shree Swami Atmanand Saraswati Institute of Technology (SSASIT), Surat, Gujarat. (on 31st July 2017)
24.	Privacy Risks and Countermeasures in Data Publishing	STTP on **"Cyber privacy and Ethical hacking"** during 1st May to 6th May, 2017 at Birla Vishvakarma Mahavidyalaya Engineering College (BVM), Vidhyanagar Anand.

		(on 05th May 2017)
25.	Big Data Computation	During **LbC (Lecture beyond Curriculum)** session at SVNIT Surat. (on 12th April 2017)
26.	Big Data Computation and Deep Learning	Two days Workshop on **"Advanced Computing: Introduction to High-performance Computing Technologies"** at PIT, Parul University during 29-30 March 2017. (on 30th March 2017)
27.	Data Publishing: Privacy Attacks and Countermeasures	Five days Short Term Training Program on **"Data Mining Applications with Big Data Analytics"** at CGPIT Bardoli, during 9 to 13 January, 2017. (on 10th December 2017)
28.	Deep Learning Methods for Big Data Analytics	Five days Short Term Training Program on **"Data Mining Applications with Big Data Analytics"** at CGPIT Bardoli, during 9 to 13 January, 2017. (on 10th December 2017)
29.	Deep learning & Significance and Challenges of Big Data Research	QIP Short Term Course on **"Advances in Big Data Analytics"** at Computer Engineering Department, SVNIT Surat during December 12-16, 2016. (on 13th December 2016)
30.	Privacy Aware Access Control for Big Data	QIP Short Term Course on **"Advances in Big Data Analytics"** at Computer Engineering Department, SVNIT Surat during December 12-16, 2016. (on 13th December 2016)
31.	NoSQL Databases and their Security Issues	QIP Short Term Course on **"Advances in Big Data Analytics"** at Computer Engineering Department, SVNIT Surat during December 12-16, 2016. (on 13th December 2016)
32.	Privacy Preserving Data Publishing: k-anonymization Algorithms	QIP Short Term Course on **"Advances in Big Data Analytics"** at Computer Engineering Department, SVNIT Surat during December 12-16, 2016. (on 12th December 2016)
33.	Introduction to Big Data Analytical Methods	QIP Short Term Course on **"Advances in Big Data Analytics"** at Computer Engineering Department, SVNIT Surat during December 12-16, 2016. (on 12th December 2016)
34.	Big data concepts	QIP Short Term Course on **"Advances in Big Data Analytics"** at Computer Engineering Department, SVNIT Surat during December 12-16, 2016. (on 12th December 2016)
35.	Big Data Analytics: Concepts & Methods	During **Faculty Development Programme (FDP)**, Bhabwan Mahavir College of Computer Application, Surat on 09th October 2016.
36.	Mathematics of Cryptographic & Research directions in Big Data	During **Faculty Development Programme (FDP)**, PIT, Parul University, Vadodara on 04th October 2016.
37.	Privacy Preserving Big Data Publishing	TEQIP-II Sponsored STTP on **"Big Data Analytics"** at Computer Engineering Department, SVNIT Surat during 27th June – 1st July, 2016. (on 29th June 2016)

38.	Big data concepts and analytical methods	TEQIP-II Sponsored STTP on **"Big Data Analytics"** at Computer Engineering Department, SVNIT Surat during 27th June – 1st July, 2016. (on 27th June 2016)
39.	Privacy Preserving Data Publishing	STTP on **"Privacy, Security Engineering and Ethical Hacking"** at Information Technology (IT) department, L.D. College of Engineering, Ahmedabad during June 20-24, 2016. (on 21st June 2016)
40.	Big Data Analytical Methods and Privacy Issues in Data Mining	Charutar Vidya Mandal (CVM) Sponsored Two Days Workshop on "Recent Avenues of Research In Information Technology" April 29-30, 2016 at GCET Vallabh Vidyanagar (on 29th April, 2016)
41.	Big Data Analytical Methods	At PIT, Parul University, Vadodara on 13th April 2016.
42.	Anonymization Techniques	National Conference on Computer and Communication Research (NC3R) during 26-27 February 2016 at Vadodara Institute of Engineering (on 26th February 2016)
43.	Privacy Preserving Data Publishing	One Week National Workshop on **Machine Learning and Data Analytics** at Government Women Engineering College Ajmer during 14th - 18th January, 2016. (on 16th Jan 2016)
44.	Big Data and its scope	One Week National Workshop on **Machine Learning and Data Analytics** at Government Women Engineering College Ajmer during 14th - 18th January, 2016. (on 16th Jan 2016)
45.	Privacy Preserving Data Publishing	At SCET Surat (on 14th August 2015)
46.	Introduction to Big Data	TEQIP-II Sponsored STTP on **Big Data and Advanced Video Compression"** at Computer Engineering Department, SVNIT Surat during 29th June - 3rd July, 2015. (on 1st July 2015)
47.	Privacy Preserving Data Mining	6th National Conference on Emerging Vistas of Technology in 21st Century (NCEVT'15) during 3rd and 4th April, 2015.
48.	Privacy Preserving in Location Based Services	TEQIP-II sponsored STTP on **"Data Mining: Security and Privacy Issues**" at Computer Engineering Department, SVNIT Surat during 23-27 June 2014.
49.	Database Intrusion Detection using Data Mining	TEQIP-II sponsored STTP on **"Data Mining: Security and Privacy Issues"** at Computer Engineering Department, SVNIT Surat during 23-27 June 2014.
50.	Privacy Preserving Association Rule Mining	TEQIP-II sponsored STTP on **"Data Mining:**

	Algorithms	**Security and Privacy Issues"** at Computer Engineering Department, SVNIT Surat during 23-27 June 2014.
51.	Introduction to Privacy Preserving Data Mining	TEQIP-II sponsored STTP on **"Data Mining: Security and Privacy Issues"** at Computer Engineering Department, SVNIT Surat during 23-27 June 2014.
52.	Privacy in Location Based Services	Research Week-2014, Gujarat Technological University, Ahmedabad (Gujarat). (on 22nd March 2014)
53.	Privacy Preserving Techniques For Location Based Services In Mobile Networks	1st International Conference On **Contemporary Issues in Engineering & Technology** at Merchant Engineering College, Basna, Mehsana (Gujarat) during 19-21March 2014.
54.	Protecting Database from Malicious Transactions	National Conference **on Recent Trends in Soft Computing (RTSCOMP 11)** at Bansal Institute of Science and Technology Bhopal during 6th-7th September 2011.
55.	An Introduction to Data Mining	AICTE Sponsored short term course on **Knowledge Management Issues and Challenges** at SVNIT, Surat during 4-8 Jan 2010. (on 6 January, 2010)
56.	Distributed Computer Architecture	AICTE Sponsored short term course on **Computer Architecture** at SVNIT, Surat during 21-25 December 2009. (on 25 December 2009)

Member of Technical Societies:

Sr. No.	Name of Association / Society	Category	Membership No.
1	Association for Computing Machinery (ACM)	Professional Membership	3009101
2	IEEE	Senior Member	94026178
3	Computer Society of India (CSI)	Life Member	I1505858
4	The Institution of Engineers (India)	Corporate Member	M-1695309
5	International Association of Engineers (IAENG)	IAENG Member	106491

Book Reviewed:

1. Book chapters reviewed- Title of the Book- **Network Security (Oxford University Press)**- October 2012.
2. Book chapters reviewed- Title of the Book- **Data Mining and Warehousing (Pearson India Education Press)** - August 2015.
3. Book chapters reviewed- Title of the Book- **Big Data Analytics (Cambridge University Press)** - October 2015.

Conference Session Chaired and Member:

1. Chaired a session in 4th International Conference on Machine Intelligence and Signal Processing (MISP 2022) March 12th - 14th, 2022 at NIT Raipur.

2. Chaired a session in International Conference on Applied Computational Intelligence and Analytics (ACIA-2022) 26-27 February, 2022 at NIT Raipur.

3. TPC member in ISEA-Security & Privacy Conference 2020, IIT Guwahati.

4. Chaired the sessions of paper presentation at 5th International Conference on Artificial Intelligence and Applications (AIAPP 2018) during February 24-25, 2018 Dubai, UAE.

5. Technical Program Committee member in Asia Security and Privacy Conference Jan 29- Feb 1, 2017 at NIT Surat, India

6. Chaired the sessions of paper presentation at 6th National Conference on Emerging Vistas of Technology in 21st Century (NCEVT'15) during 3rd and 4th April, 2015.

7. Member in National Advisory Board in ISTE Sponsored National Conference (IICE-2015) , CHANDIGARH UNIVERSITY, MOHALI, 17 April 2015

8. Chaired the sessions of paper presentation at 1st International Conference On Contemporary Issues in Engineering & Technology at Merchant Engineering College, Basna, Mehsana (Gujarat) during 19-21March 2014.

9. Member in Advisory Committee in National Conference on Computer and Security (April 5-6, 2013) at Sardar Vallabhbhai Patel Institute of Technology (SVIT), VASAD-388306, Gujarat, INDIA.

10. Chaired the paper presentation sessions at Second National Conference on Emerging Vistas of Technology in 21st Century, 4th & 5th December 2010 at Parul Institute of Engineering and Technology, Vadodara (Gujarat).

11. Chaired the sessions of paper presentation at BAIP-2010 during 26 and 27 March 2010 at Trivendrum, Kerala (Proceeding published by LNCS-CCIS Springer).

Academic Awards/ Fellowships/ Scholarships

1. Grant of a funded research project entitled "Design and Implementation of Secure Service and Attribute-based Authorization Model in Dynamic and Constrained-specific IoT Environment" by **IHUB NTIHAC Foundation, IITK, under the aegis of the National Mission on Interdisciplinary Cyber-Physical System (NM-ICPS), Department of Science and Technology, Government of India**.

2. Elevation to the grade of IEEE Senior member.

3. Special Issue Editor on Special Issue entitled "AI & Blockchain Assisted Innovative Techniques & Solutions to Modern CPS Security for Industry 4.0/5.0", Name of Journal: Sensors (MDPI Publisher).

4. Received grant from **AICTE Training And Learning (ATAL) Academy** to conduct an ONLINE One week FDP on Cyber Threat Intelligence & Digital Forensics (CTIDF) during 19-23 July 2021 vide Sanction No. and Date: 01_/AICTE/ATAL-HQ/2020-21 dated 03-06-2021, Amount: 93,000/-.

5. Signing of MoU between SVNIT Surat and IHUB NTIHAC Foundation, IIT Kanpur in Nov 2021 as part of a sanctioned research project under the aegis of the National Mission on Interdisciplinary Cyber-Physical System (NM-ICPS), DST, GoI.

6. He was awarded National Scholarship from 10th Std. till Graduation is given to meritorious students by the Uttar Pradesh state board.

7. Qualified GATE 2003 with 91.17 percentile score.

8. First Runner-up position in poster presentation on "Privacy-Preserving Dummy Generation in Location-Based Services" at 9th International Conference on Security, Privacy and Applied Cryptographic Engineering (SPACE 2019), Dhirubhai Ambani Institute of Information and Communication Technology (DA-IICT), Gandhinagar, India.

9. PhD thesis of my student "Dr. Ruchika Gupta" entitled "Investigating and Devising Privacy Preserving Approaches for Location Based Services" was shortlisted for Doctoral Dissertation Award at IIT Guwahati during a prestigious event ISEA-Security & Privacy Conference 2020.

10. PhD student Mr. Dilay Parmar got second prize in PhD Forum Poster Demonstration in connection with the 3rd ISEA International Conference on Security and Privacy (ISEA-ISAP 2020) organized by Department of Computer Engineering, IIT Guwahati from 27th Feburary- 1st March 2020.

11. Completed 12 weeks (Jan- April 2020) NPTEL online certification course on Cryptography and Network Security.

12. Completed 08 weeks (June- July 2020) Coursera online course on Blockchain Basics.

Consultancy Work Done:

Inspection of projector and Boards at SMC Schools, 2015-16- Prof. D R Patel, Prof. D C Jinwala, Dr. Mukesh A. Zaveri, Dr. U P Rao

Administrative and other responsibilities, Innovative Practices etc:

1. Professor-In-Charge Computing & Networking Facility (08 April 2019 to 08 April 2022)
2. Coordinator- ERP (Enterprise Resource Planning) since 7th May 2019.
3. TEQIP Departmental Coordinator since 13th Feb 2019.
4. Member Secretary (DAAC) since 13th Feb 2019.
5. Faculty Coordinator for B.Tech First Year since 13th Feb 2019.
6. Co-coordinator of MIS, since 11th March 2015- Jan 2018.
7. Exam Time Table Committee Member, since 28th February 2017.
8. PG In-charge of M.Tech.(Computer Engineering), 03rd February 2010- 27th February 2017.
9. In-charge–PG Examination, Time Table, and Accreditation, 03rd February 2010- 27th February 2017.
10. In-charge of Central Computer Centre during 4 Jan- 18 March 2016 (Ref No. CoED/MAZ/CCC/925/2015-16 dated 1st Jan, 2016)
11. PG In-charge of M.Tech.(Computer Engineering), 23rd September 2008-02nd February 2010 .
12. In-charge–PG Examination and Time Table, 23rd September 2008-02nd February 2010.
13. Chief Warden of H-8 (Tagore Bhavan), January 2014- June 2014.
14. A member of official language of the institute (HINDI CELL) during year 2011.
15. Hostel warden, Council of Wardens, Feb. 2008 to Dec. 2013.
16. Registration committee member for Convocation Function-2007 and 2013.

Signature

Dr. Udai Pratap Rao