

Dr Madhuri D Bhavsar

Director, GTU-SET ,Ahmedabad, Gujarat.

PERSONAL PROFILE

Phone Number: 9879050660
Email Id: director_set@gtu.edu.in, drmdb2025@gtu.edu.in,
madhuri.bhavsar@gtu.edu.in
Resident Address: 105, Shivganesh Bungalows,
100 Ft Shilaj Road,
Thaltej, Ahmedabad
Date of Birth: 3rd September 1971

EDUCATION

April 2012	Doctor of Philosophy (Technology and Engineering) from Nirma University with specialization in High Performance Computing
May 1999-2001	Master of Engineering (Microprocessor Systems and applications) With First class, M S University, Baroda, Gujarat
May 1988-1992	Bachelor of Engineering (Computer Engineering) With First class, SSGM College of Engineering, Shegaon Amaravati University, Maharashtra

RESEARCH PROFILE (as per Google Scholar)

Citations – 1226
h-index – 19
i-10 index – 30

EXPERIENCE AT GLANCE

Administrative Experience as Head of CSE department at Nirma University : 23 Years
Research Experience : 25 Years
Teaching Experience : 30 Years
Industry Experience : 9 months

ACCREDITATION

- Contributed in the process of NAAC & NBA two times as Head of department
- Executed Mock NBA at MS University, Vadodara in December 2022

PhD GUIDANCE

Recognized PhD Guide at Nirma University and currently guiding 5 PhD students. Under my supervision, 6 scholars has successfully awarded PhD

COMPLETED FUNDED RESEARCH PROJECT

Completed Projects:	(1) Funded by DST:Under the theme of Interdisciplinary cyber physical systems, Project entitled “Proactive solutions for achieving trust in cloud computing using machine learning” with total approved budget of 25 lakhs. The reference number is T-952. Investigator: Dr. Madhuri Bhavsar. Date of completion March 2022.
	(2) Funded by ISRO :NISAR Project entitled “SAR Polarimetry for Detecting Ocean Surface Targets” has been approved. Project duration for three years with total approved budget of Rs.18.52 lakhs funded by ISRO. Investigators: Dr Madhuri Bhavsar(PI), Dr Zunnun. Completion date March 2021.
	(3) Funded by ISRO :NISAR Project entitled “Mining agricultural cover, crop type and image from SAR L and S band.” has been approved for three years with total cost of Rs.14.28 lakhs budget funded by ISRO. Investigators: Dr Madhuri Bhavsar (PI), Dr Swati Jain, Dr Zunnun Narmawala and Prof Vivek Prasad (Co-PI). Completion date March 2021.
	(4) BRNS funded project entitled “Optimizing parallelization of Leacy Code on appropriate HPC platform”. 14 lakhs are funded. Principle Investigator: Dr Madhuri Bhavsar , Dr Gaurang, Prof Monika , Dr N k Shah and Dr Ganesh (From IPR) .
	(5) Design and development of Automated and Reliable service provisioning cloud architecture for Engineering Educational Domain. (Amount – 3,00,000/-, Funding Agency – GujCost) Project Completion Date:2/1/2017 Principle Investigator: Dr. Madhuri Bhavsar Co-PI – Prof. Lata Gadhavi

	(6) ISRO Funded Remote Sensing-based detection and tracking of marine litter (special emphasis to macro plastic) along the Indian coast, funded by ISRO PI-Madhuri Bhavsar Amount 24 lcs
Ongoing project	Project Title: Leveraging Deep Learning on NISAR L & S Band SAR Data for Marine Pollution (Oil Spill) Trajectory Analysis, funded by ISRO Amount 23.3 Lacs

AWARDS AND RECOGNITION

- Received ISTE National award for Best woman in Engineering for the year 2021.
- Received ISTE CVM-VVN, Best Engineering College Teacher Award for Gujarat State-2017 in recognition of outstanding contribution to the Academic Community and Students. Received this award during 47th ISTE National Annual Convention held at Kottayam in January 2018.
- Selected as a member of Evaluators Panel of National Board of Accreditation
- Received “Param Shavak” Supercomputer from GUJCOST.
- Recipient of an award “Best research paper of the conference” for the paper entitled "Classification of crop types using C band SAR Data", IEEE International Conference on Knowledge Discovery in Science and Technology-2019(ICKDST-19) held at PUNE
- Received an award of “Best Paper” in an IEEE International Conference on “Global Trends in Signal Processing, Information Computing and Communication” organized by College of Engineering and Technology Jalgaon on 22-24 December 2016.
- Received an award of “Best Paper” in CSI National Conference held at Bardoli, during 2006.
- During the services of Coordinator-ship, ISTE Faculty Chapter, Institute has received an award of “Best Faculty Chapter” consecutively 3 times in 2012, 2011, and 2010.
- Received fund from SRM University in coordination with ISTE for conducting short term Training program for faculty members on “Multicore Computing: Concepts and Challenges” conducted in March 2013.

BOOKS PUBLISHED

May 2016

Editors: P. N. Tekwani, **Madhuri Bhavsar** and B. A. Modi, “Multi-disciplinary Sustainable Engineering: Current and Future Trends”, published by CRC Press, T&F.

MAJOR ACHIEVEMENTS/Keynote Talks/Expert talks

- Granted 01 Patent and submitted 03
- Organized 4th international conference on “Futuristic Trends in Network and Computing Technologies (FTNCT 2021)” during December 10-11, 2021 at Nirma University, Ahmedabad. Handled responsibilities as a ‘Principal General Chair’. It was technically collaborated with Springer.
- Worked as a Conference Chair of 5th Nirma University International Conference NUICON 2015, technically cosponsored by IEEE and Taylor & Francis group, organized during 26-28 November 2015.
- Worked as a Co-chair for 4th Nirma University International Conference NUICON 2013, technically cosponsored by IEEE and Science Direct.
- Worked as a Secretary of ISTE (Indian Society for Technical Education) for Gujarat Section for three years.
- Member of Research committee at University, Institute and department level.
- Keynote speaker “Topic: E Cloud Computing with Secure Resources and Data Coloring” during 2nd international Conference on Computing, Communication and Cyber-Security, held during 3-4 October 2020 at Krishna Engineering College, Ghaziabad
- Delivered an Expert Talk on “Trusted Cloud Computing with Secure Resources and Data Coloring” at ETCA2020 : National Seminar on Emerging Trends and Applications at the Maharaja Sayajirao University of Baroda, Baroda.
- Delivered an expert Talk on "Establishing Trust and Reputation in Cloud" at International Lecture series “ BU-NU lecture series” at Nirma University on 18 September 2020
- Keynote speaker “Topic: Contemporary issues in cloud Computing” and session chair during IEEE International conference on knowledge Discovery in Science and Technology, held during 26-28 February 2018 at Pune
- Plenary Talk “Topic : Cloud Computing and Research issues” delivered during

International conference on ICGTETM held at COET Jalgaon during 4-6 January 2016

- Delivered an expert Talk on "Establishing Trust in Cloud Computing" at Devang Patel Institute of Advance Technology and Research, CHARUSAT on 14 October 2020
- Appointed as a Program Committee member for 36th International Conference on Software Engineering, June 1-7 2014 Hyderabad

Research Publications

1. Saluja, Payal, Bhavsar, Madhuri. "KDCFI AI-based knowledge discovery framework for cloud forensic investigation: P. Saluja et al.." The Journal of Supercomputing, 2025.
2. Prajapati, Kinjal, Bhavsar, Madhuri, Mahajan, Alka. "GSCAT-UNET: Enhanced U-Net model with spatial-channel attention gate and three-level attention for oil spill detection using SAR data." Marine Pollution Bulletin, 2025.
3. Patel, Binal, Thakkar, Riddhi, Bhavsar, Madhuri. "Secure Horizons: An Analytical Review of Machine Learning Techniques and Zero Trust Strategies for Scalable Cloud Security." 2025.
4. Patel, Kaju, Kumhar, Malaram, Bhatia, Jitendra, Chudasama, Vipul, Prasad, Vivek, Bhavsar, Madhuri. "Multi-facial recognition in cloud-based attendance systems: Advancements and applications." 2025.
5. Dadheech, Aarti, Rajput, Vipasha, Bhavsar, Madhuri. "Using mediapipe holistic skeleton tracking and XGBoost real-time elderly fall detection and classification." 2025.
6. Thakkar, Riddhi, Bhavsar, Madhuri. "MeghMesa: a multilevel elasticity for streaming applications in cloud: R. Thakkar, M. Bhavsar." The Journal of Supercomputing, 2025.
7. Mohapatra, Santoshinee, Shrimali, Bela, Vala, Payal, Padariya, Rutvi, Bhatia, Jitendra, Kumhar, Malaram, Bhavsar, Madhuri. "A novel voting classifier approach with PCA for breast cancer prediction." 2025.
8. Dadheech, Aarti, Bhavsar, Madhuri. "AirNav: A Computation-driven Cloud-based Solution for the Drone Path Planning Utilizing Machine Learning." Procedia Computer Science, 2025.
9. Choudhary, Shashank G, Verma, Jai Prakash, Bhavsar, Madhuri. "Emergence of Bayesian Network as Data Imputation Technique in Clinical Trials." Data Science and Artificial Intelligence for Digital Healthcare: Communications Technologies for Epidemic Models, 2024.
10. Prasad, Vivek Kumar, Verma, Ashwin, Bhattacharya, Pronaya, Shah, Sheryal, Chowdhury, Subrata, Bhavsar, Madhuri, Aslam, Sheraz, Ashraf, Nouman. "Revolutionizing healthcare: a comparative insight into deep learning's role in medical imaging." Scientific Reports, 2024.
11. Dadheech, Aarti, Bhavsar, Madhuri, Verma, Jai Prakash, Prasad, Vivek Kumar. "Deep learning based smart traffic management using video analytics and IoT sensor fusion: A. Dadheech et al.." Soft Computing, 2024.

- 12.** Thakkar, Riddhi Sanjaykumar, Thakkar, Dhyan, Bhavsar, Madhuri. "Mvms: Rnn based proactive resource scaling in cloud environment." Scalable Computing: Practice and Experience, 2023.
- 13.** Bhargav, Shir, Bhattacharya, Pronaya, Bhavsar, Madhuri, Bostani, Ali, Chowdhury, Subrata, Mehbodniya, Abolfazl, Verma, Jai Prakash, Webber, Julian. "Graph-Based Extractive Text Summarization Sentence Scoring Scheme for Big Data Applications." 2023.
- 14.** Bhattacharya, Pronaya, Verma, Jai Prakash, Bhargav, Shir, Bhavsar, Madhuri. "GETS: Sentence Scoring Scheme in Graph-based Extractive Text Summarization for Text Mining Applications." Authorea Preprints, 2023.
- 15.** Prasad, Vivek Kumar, Dansana, Debabrata, Bhavsar, Madhuri D, Acharya, Biswaranjan, Gerogiannis, Vassilis C, Kanavos, Andreas. "Efficient resource utilization in iot and cloud computing." Information, 2023.
- 16.** Prasad, Vivek Kumar, Mehta, Rachana, Bhavsar, Madhuri, Tanwar, Sudeep, Bakshi, Mahima. "Robotics and process automation technologies for healthcare informatics." 2023.
- 17.** Verma, Jai Prakash, Bhargav, Shir, Bhavsar, Madhuri, Bhattacharya, Pronaya, Bostani, Ali, Chowdhury, Subrata, Webber, Julian, Mehbodniya, Abolfazl. "Graph-based extractive text summarization sentence scoring scheme for big data applications." Information, 2023.
- 18.** Purohit, Ravindrakumar, Verma, Jai Prakash, Jain, Rachna, Bhavsar, Madhuri. "Wepamad-outlier detection: weighted outlier detection using pattern approaches for mass data mining." 2023.
- 19.** Prasad, Vivek Kumar, Dansana, Debabrata, Patro, S Gopal Krishna, Salau, Ayodeji Olalekan, Yadav, Divyang, Bhavsar, Madhuri. "CIA-CVD: cloud based image analysis for COVID-19 vaccination distribution." Journal of Cloud Computing, 2023.
- 20.** Prasad, Vivek Kumar, Nimavat, Ved, Trivedi, Kaushha, Bhavsar, Madhuri. "Utilizing deep learning methodology to classify diabetic retinopathy." 2023.
- 21.** Prasad, Vivek Kumar, Solanki, Jainil, Bhattacharya, Pronaya, Verma, Ashwin, Bhavsar, Madhuri. "Artificial intelligence applications for IoMT." 2023.
- 22.** Francis, Sofia Biju, Verma, Jai Prakash, Bhavsar, Madhuri. "Alzheimer's detection using demographic information with a combined approach of neural network and grid search CV." 2023.
- 23.** Prasad, Vivek Kumar, Bhattacharya, Pronaya, Bhavsar, Madhuri, Verma, Ashwin, Tanwar, Sudeep, Sharma, Gulshan, Bokoro, Pitshou N, Sharma, Ravi. "ABV-COVID: An ensemble forecasting model to predict availability of beds and ventilators for COVID-19 like pandemics." Ieee Access, 2022.
- 24.** Saluja, Payal, Jain, Swati, Bhavsar, Madhuri. "Machine Learning-Based Model for Effective Resource Provisioning in Cloud." 2022.
- 25.** Pratyush, Khare, Prasad, Vivek Kumar, Mehta, Rachana, Bhavsar, Madhuri. "A Secure Mechanism for Safeguarding Cloud Infrastructure." 2022.
- 26.** Patel, Manashri, Prasad, Vivek Kumar, Bhattacharya, Pronaya, Bhavsar, Madhuri, Zuhair, Mohd. "Privacy preservation for big data healthcare management." 2022.

- 27.** Prasad, Vivek Kumar, Chudasama, Vipul, Mewada, Akshay, Bhavsar, Madhuri, Shah, Asheesh. "Csbrca: cloud security breaches and its root cause analysis." 2022.
- 28.** Prajapati, Kinjal, Ramakrishnan, Ratheesh, Bhavsar, Madhuri, Mahajan, Alka, Narmawala, Zunnun, Bhavsar, Archana, Raboaca, Maria Simona, Tanwar, Sudeep. "Log transformed coherency matrix for differentiating scattering behaviour of oil spill emulsions using SAR images." Mathematics, 2022.
- 29.** Prasad, Vivek Kumar, Abhishek, A Raval, Bhavsar, Madhuri. "System in Cloud Computing." Inventive Communication and Computational Technologies: Proceedings of ICICCT 2022, 2022.
- 30.** Prasad, Vivek Kumar, Dansana, Debabrata, Mishra, Brojo Kishore, Bhavsar, Madhuri. "Intensify cloud security and privacy against phishing attacks." Electrochemical Society Transactions, 2022.
- 31.** Gadhavi, Lata J, Bhavsar, Madhuri D. "Adaptive cloud resource management through workload prediction." Energy Systems, 2022.
- 32.** Bhatia, Jitendra, Italiya, Kiran, Jadeja, Kuldeepsinh, Kumhar, Malaram, Chauhan, Uttam, Tanwar, Sudeep, Bhavsar, Madhuri, Sharma, Ravi, Manea, Daniela Lucia, Verdes, Marina, others. "An overview of fog data analytics for IoT applications." Sensors, 2022.
- 33.** Thakkar, Riddhi, Bhavsar, Madhuri. "Naarprec: A novel approach for adaptive resource prediction in cloud." 2022.
- 34.** Bakshi, Mahima Sandeep, Banker, Drashti, Prasad, Vivek, Bhavsar, Madhuri. "Smlhadc: security model for load harmonization and anomaly detection in cloud." 2022.
- 35.** Thakkar, Riddhi, Bhavsar, Madhuri. "Achieving multilevel elasticity for distributed stream processing systems in the cloud environment: A review and conceptual framework." 2022.
- 36.** Prasad, Vivek Kumar, Raval Abhishek, A, Bhavsar, Madhuri. "HIDSC2: Host-based intrusion detection system in cloud computing." 2022.
- 37.** Dansana, Debabrata, Prasad, Vivek Kumar, Bhavsar, Madhuri, Mishra, Brojo Kishore. "Intensify Cloud Security and Privacy Against Phishing Attacks." SGS-Engineering & Sciences, 2021.
- 38.** Prasad, Vivek Kumar, Trivedi, Chandan, Jha, Dhaval, Bhavsar, Madhuri. "Blockchain-Based Security and Privacy for Smart Contracts." 2021.
- 39.** Prasad, Vivek Kumar, Tanwar, Sudeep, Bhavsar, Madhuri. "C2B-SCHMS: Cloud computing and bots security for COVID-19 data and healthcare management systems." 2021.
- 40.** Prasad, Vivek Kumar, Bhavsar, Madhuri D. "SLAMMP framework for cloud resource management and its impact on healthcare computational techniques." International Journal of E-Health and Medical Communications (IJEHMC), 2021.
- 41.** Rathod, Tejal, Shah, Monika, Shah, Niraj, Raval, Gaurang, Bhavsar, Madhuri, Ganesh, Rajaraman. "On Performance Enhancement of Molecular Dynamics Simulation Using HPC Systems." 2021.

42. Bhatia, Jitendra, Dave, Jashvant, Bhavsar, Madhuri, Tanwar, Sudeep, Kumar, Neeraj. "SDN-enabled adaptive broadcast timer for data dissemination in vehicular ad hoc networks." IEEE Transactions on Vehicular Technology, 2021.
43. Chudasama, Vipul, Bhavsar, Madhuri. "A dynamic prediction for elastic resource allocation in hybrid cloud environment." Scalable Computing: Practice and Experience, 2020.
44. Prasad, Vivek Kumar, Bhavsar, Madhuri D. "Monitoring IaaS cloud for healthcare systems: Healthcare information management and cloud resources utilization." International Journal of E-Health and Medical Communications (IJEHMC), 2020.
45. Bhatt, Gopi, Bhavsar, Madhuri. "Performance consequence of user space file systems due to extensive CPU sharing in virtual environment." Cluster Computing, 2020.
46. Prasad, Vivek K, Bhavsar, Madhuri. "Preserving SLA parameters for trusted IaaS cloud: An intelligent monitoring approach." Recent Patents on Engineering, 2020.
47. Prasad, Vivek Kumar, Bhavsar, Madhuri D. "Monitoring and prediction of SLA for IoT based cloud." Scalable Computing: Practice and Experience, 2020.
48. Mewada, Akshay, Gujran, Reetu, Prasad, Vivek Kumar, Chudasama, Vipul, Shah, Asheesh, Bhavsar, Madhuri. "Establishing trust in the cloud using machine learning methods." 2020.
49. Prajapati, Kinjal, Prajapati, Payal, Ramakrishnan, Ratheesh, Mahajan, Alka, Bhavsar, Madhuri. "Feature combination of Pauli and H/A/alpha decomposition for improved oil spill detection using SAR." 2020.
50. Parmar, Priya, Bhavsar, Madhuri. "Achieving trust using rot in IAAS cloud." Procedia Computer Science, 2020.
51. Prasad, Vivek Kumar, Tanwar, Sudeep, Bhavsar, Madhuri D. "Advance cloud data analytics for 5G enabled IoT." 2020.
52. Bhatia, Jitendra, Kakadia, Parth, Bhavsar, Madhuri, Tanwar, Sudeep. "SDN-enabled network coding-based secure data dissemination in VANET environment." IEEE Internet of Things Journal, 2019.
53. Gadhavi, Lata J, Bhavsar, Madhuri D. "Efficient resource provisioning through workload prediction in the cloud system." 2019.
54. Prasad, Vivek Kumar, Bhavsar, Madhuri D, Tanwar, Sudeep. "Influence of monitoring: Fog and edge computing." Scalable Computing: Practice and Experience, 2019.
55. Bhatia, Jitendra, Modi, Yash, Tanwar, Sudeep, Bhavsar, Madhuri. "Software defined vehicular networks: A comprehensive review." International Journal of Communication Systems, 2019.
56. Bhatt, Gopi, Bhavsar, Madhuri. "Advances in Modelling and Analysis B." Journal homepage: http://iieta.org/Journals/AMA/AMA_B, 2018.
57. Bhatia, Jitendra, Govani, Radha, Bhavsar, Madhuri. "Software defined networking: From theory to practice." 2018.
58. Dhote, Himanshu, Bhavsar, Madhuri D. "Practice on detecting malware in virtualized environment of cloud." 2018.

- 59.** Gadhavi, Lata J, Bhavsar, Madhuri D. "Prediction based efficient resource provisioning and its impact on QoS parameters in the cloud environment." *International Journal of Electrical and Computer Engineering (IJECE)*, 2018.
- 60.** Prasad, Vivek Kumar, Shah, Mrugesh, Bhavsar, Madhuri D. "Trust management and monitoring at an IaaS level of cloud computing." 2018.
- 61.** Prasad, Vivek Kumar, Bhavsar, Madhuri D, Patel, Namrata. "Chronicles of Assaults at Cloud Computing and its Influence at an IaaS." 2018.
- 62.** Prasad, Vivek Kumar, Pandya, Kedar, Bhavsar, Madhuri D. "Reducing the operative resource monitoring mechanism overhead in cloud: an IaaS perspective." 2018.
- 63.** Prasad, Vivek Kumar, Shah, Mrugesh, Patel, Namrata, Bhavsar, Madhuri. "Inspection of trust based cloud using security and capacity management at an IaaS level." *Procedia computer science*, 2018.
- 64.** Gadhavi, Lata J, Bhavsar, Madhuri D. "Proposed Methodology to Strengthen the Performance of Adaptive Cloud Using Efficient Resource Provisioning." 2018.
- 65.** Gajre, Parimal, Prasad, Vivek, Bhavsar, Madhuri. "Advance Resource Reservation based on Context Aware Workload.." *International Journal of Advanced Research in Computer Science*, 2017.
- 66.** Sutaria, Vidhi, Prasad, Vivek K, Bhavsar, Madhuri. "Fault Prediction and Mitigation in Cloud Computing.." *International Journal of Advanced Research in Computer Science*, 2017.
- 67.** Mehta, Harshil, Prasad, Vivek Kumar, Bhavsar, Madhuri. "Efficient resource scheduling in cloud computing." *International Journal of Advanced Research in Computer Science*, 2017.
- 68.** Thakkar, Riddhi, Trivedi, Rinni, Bhavsar, Madhuri. "Experimenting with energy efficient VM migration in IaaS cloud: moving towards green cloud." 2017.
- 69.** Chudasama, Vipul, Tilala, Dhaval, Bhavsar, Madhuri. "SLA Management in Cloud Federation." 2017.
- 70.** Raval, Gaurang, Bhavsar, Madhuri, Patel, Nitin. "Enhancing data delivery with density controlled clustering in wireless sensor networks." *Microsystem Technologies*, 2017.
- 71.** Bhatia, Jitendra, Mehta, Ruchi, Bhavsar, Madhuri. "Variants of software defined network (sdn) based load balancing in cloud computing: A quick review." 2017.
- 72.** Chudasama, Vipul, Shah, Jinesh, Bhavsar, Madhuri. "Weight based workflow scheduling in cloud federation." 2017.
- 73.** Prasad, Vivek Kumar, Bhavsar, Madhuri. "Efficient resource monitoring and prediction techniques in an IaaS level of cloud computing: Survey." 2017.
- 74.** Prasad, Vivek Kumar, Mehta, Harshil, Gajre, Parimal, Sutaria, Vidhi, Bhavsar, Madhuri. "Capacity planning through monitoring of context aware tasks at IaaS level of cloud computing." 2017.
- 75.** Prasad, Vivek Kumar, Bhavsar, Madhuri. "Exhausting autonomic techniques for meticulous consumption of resources at an IaaS layer of cloud computing." 2017.

- 76.** Gadhavi, Lata, Bhavsar, Archana, Vasoya, Shivani, Bhavsar, Madhuri. "Design and development of automated and reliable service provisioning cloud architecture for engineering educational domain." 2016.
- 77.** Gadhavi, Lata, Bhavsar, Madhuri, Bhatnagar, Monica, Vasoya, Shivani. "Design of efficient algorithm for secured key exchange over cloud computing." 2016.
- 78.** Bhavsar, Madhuri, Prajapati, Jimesh R, Bhavsar, Archana. "Semantic enabled cloud for compute—Intensive applications." 2016.
- 79.** Bhatia, Jitendra, Patel, Prakash, Bhavsar, Madhuri. "Effective resource utilization using software defined networking based load balancer for minimizing request service time." 2016.
- 80.** Tekwani, PN, Bhavsar, Madhuri, Modi, BA. "Multi-disciplinary Sustainable Engineering: Current and Future Trends: Proceedings of the 5th Nirma University International Conference on Engineering, Ahmedabad, India, November 26-28, 2015." 2016.
- 81.** Vasoya, Shivani, Gadhavi, Lata, Bhatia, Jitendra, Bhavsar, Madhuri. "Resource provisioning strategies in cloud: a survey." 2016.
- 82.** Gadhavi, Lata, Bhavsar, Madhuri. "Efficient and dynamic resource provisioning strategy for data processing using cloud computing." International Review on Computers and Software (I. RE. CO. S.), 2016.
- 83.** Bhatt, Gopi, Bhavsar, Madhuri. "Performance analysis of Microsoft Windows 2008 R2 active directory server in consolidated virtualized environment on IBM's HS22 high performance blade." 2016.
- 84.** Gadhavi, Lata, Modi, Vishakha, Bhavsar, Madhuri. "Proposed Ontology Framework for Dynamic Resource Provisioning on Public Cloud." International Journal of Advanced Research in Engineering and Technology (IJARET), 2016.
- 85.** Kotecha, Ketan, Bhavsar, M, Modi, BA, Tekwani, PN. "Multi-Disciplinary Sustainable Engineering: Proceedings of the 5th Nirma University International Conference on Engineering, Ahmedabad, India, November 26-28 2015." 2016.
- 86.** Raval, Gaurang, Bhavsar, Madhuri, Patel, Nitin. "Analyzing the performance of centralized clustering techniques for realistic wireless sensor network topologies." Procedia Computer Science, 2015.
- 87.** Chhajed, Rajendra, Purohit, Himanshu, Bhavsar, Madhuri. "Model based robust Peak Detection algorithm of Radiation Pulse Shape using limited samples." 2015.
- 88.** Raval, Gaurang, Bhavsar, Madhuri. "Improving energy estimation based clustering with energy threshold for wireless sensor networks." 2015.
- 89.** Raval, Gaurang, Bhavsar, Madhuri, Patel, Nitin. "Performance Comparison of Various Clustering Techniques in Wireless Sensor Networks." 2014.
- 90.** Raval, Gaurang, Bhavsar, Madhuri, Patel, Nitin. "Improving Data Delivery with Density Control based Clustering in Wireless Sensor Networks." 2014.
- 91.** Patel, Pradip, Karamta, Miren, Bhavsar, Madhuri, Potdar, MB. "Live virtual machine migration techniques in cloud computing: A survey." 2014.
- 92.** Raval, Gaurang, Shah, Abhinav, Bhavsar, Madhuri. "Optimization of Clustering Techniques Using Energy Thresholds in Wireless Sensor Networks." 2013.

- 93.** Bhavsar, Madhuri. "NCloud-Experimenting with Architecting and Facilitating Utility Services for establishing Educational Cloud." *Journal of Mobile, Embedded and Distributed Systems*, 2013.
- 94.** Gadhavi, Lata, Korat, Darpan, Bhavsar, Madhuri. "Proposed cloud architecture for automated & reliable service provisioning of engineering educational domain." 2013.
- 95.** Bhavsar, Madhuri D. "Performance Measurement of Scientific Grid-Roadmap to eScience." 2011.
- 96.** Patel, Sanjay, Bhavsar, Madhuri. "QoS based user driven scheduler for grid environment." *arXiv preprint arXiv:1102.0516*, 2011.
- 97.** Bhavsar, Madhuri, Pradhan, SN. "NGSched-An Efficient Scheduling Algorithm Handling Interactive Jobs in Grid Environment." 2011.
- 98.** Patel, Sanjay, Bhavsar, Madhuri. "Development of QoS based User Driven Scheduler Design and Result Analysis." 2011.
- 99.** Bhavsar, Madhuri, Singh, Anupam, Pradhan, Shrikant. "Classification of weather indices on secured computational grid." *International Journal of u-and e-Service, Science and Technology*, 2011.
- 100.** Revar, Ashish G, Bhavsar, Madhuri D. "Securing user authentication using single sign-on in Cloud Computing." 2011.
- 101.** Patel, Sanjay, Bhavsar, Madhuri. "Development of QoS based Scheduling Algorithm in the Grid Environment." 2010.
- 102.** Bhavsar, Madhuri. "Analysis of Multiagent Based Interactive Grid Using Formal Methods-A Reliable Approach." 2010.
- 103.** Gadhavi, Lata, Bhavsar, Madhuri. "Handling Complex Use Scenarios for Selection of Best Resources." 2010.
- 104.** Gayatri, S, Bhavsar, Madhuri. "Effective Resource Management in Clouds Using Advance Reservation." *Resource*, 2010.
- 105.** Revar, Ashish, Andhariya, Malay, Sutariya, Dharmendra, Bhavsar, Madhuri. "Load balancing in grid environment using machine learning-innovative approach." 2010.
- 106.** Revar, Ashish, Bhavsar, Madhuri. "Analyzing Cloud Possibilities and Limitations." 2010.
- 107.** Bhavsar, Madhuri D, Pradhan, Shrikant N. "Scavenging idle CPU cycles for creation of inexpensive supercomputing power." *International Journal of Computer Theory and Engineering*, 2009.
- 108.** Bhavsar, Madhuri. "User Centric Job Management In Grid Using Multiple Agents An Unified Approach." 2009.
- 109.** Purohit, Kartik, Bhavsar, Madhuri. "Computational Load Management in Grid Application--A Dynamic Perspective." 2008.
- 110.** Bhavsar, Madhuri, Singh, A K, Pradhan, SN. "Performance Assessment of Computational Grid on Weather Indices from HOAPS Data." 2008.

- 111.** Bhavsar, Madhuri, Pradhan, SN. "Anatomy of Experimental Computational Grid and Elevated Research Issues." 2006.
- 112.** Mandowara, Ankita, Bhavsar, Madhuri, Jain, Swati, Desai, Devansh, Bhattacharya, Bimal, Narmawala, Zunnun, Nigam, Rahul. "CLASSIFICATION OF CROP TYPES USING C-BAND SAR DATA."
- 113.** Joshi, Kimee, Bhavsar, Madhuri, Narmawala, Zunnun, Jain, Swati. "Using optical images to demarcate fields in L band SAR images for effective deep learning based crop classification and crop cover estimation." Cloud, IAAS,
- 114.** Doshi, Kinjal, Bhavsar, Archana, Bhavsar, Madhuri, Jimesh, R, Chougule, Archana, Kumar, Vijay, Ranchi, Mesra, Ramparany, Fano, Quyet, H, others. "9 Identity based Key Generation Purvi Ramanuj and JS Shah RK University, Rajkot."
- 115.** Bhatia, Jitendra, Modi, Yash, Tanwar, Sudeep, Bhavsar, Madhuri. "Software defined vehicular networks: A comprehensive."
- 116.** Chudasama, Vipul, Bhavsar, Madhuri. "Exploratory Learning of Resource Management in Private Cloud Environment."
- 117.** Gadhavi, Lata, Korat, Darpan, Bhavsar, Madhuri. "SLA Based an Efficient and Reliable Resource Provisioning in Private Cloud."

Activities at other Institutes

- Invited as VC Nominee subject expert for the interviews of Assistant Professor at Department of CSE at The Maharaja Sayajirao University of Baroda on 24 May 2019
- Invited as an External Expert Member for Board of Studies Meeting, for approving the Curriculum & Syllabus of M. Tech (Computer Engineering) and B. Tech (Information and communication technology (ICT)) at Institute of Advanced Research, Gandhinagar on 18 January 2020
- Member of Academic Council, FoTE and BOS at Institute of technology Nirma University.
- Member of Advisory Board and Area Editors-2013 for Nirma University Journal of Engineering and Technology
- Session Chair in IEEE International conference on "Emerging Trends in Electronics, Communication and Networking" organized at SVNIT, Surat during 19-21 December 2012
- Members of selection committee/Research project Scrutiny/BoS at various Institutes.

RESEARCH PUBLICATIONS (International Journal)

- National Conferences:

- | | |
|-------------|---|
| 2007 | Madhuri Bhavsar, Shrikant Pradhan, "Grid Based Compute Intensive Loads with Efficient Usage of Processing Power - NUCONE-07, National Conference on Current Trends in Technology, November 29-December 1, 2007. |
| 2006 | Madhuri Bhavsar, Shrikant Pradhan, " Anatomy of Experimental Computational Grid and elevated Research Issues.", National Conference on Current Trends in Technology, NUCONE 2006 at Nirma University of Science and Technology, Ahmedabad, 29 Nov - 1 Dec, 2006. |
| 2006 | Madhuri Bhavsar, Shrikant Pradhan, " Relevance of Grid with Alchemi for Virtual Path Management" - NCIIRP - 2006, National conference on Intelligent Information Retrieval & Processing at Shrimad Rajchandra Institute of Management and Computer Application and CSI Surat Chapter, Bardoli.,29 – 30 April,2006.
<u>[Winner of Best Paper award].</u> |

Book Chapters

- | | |
|----------------------|---|
| January 2023 | Pratyush, Khare, et al. "A Secure Mechanism for Safeguarding Cloud Infrastructure." <i>Advancements in Smart Computing and Information Security: First International Conference, ASCIS 2022, Rajkot, India, November 24–26, 2022, Revised Selected Papers, Part II</i> . Cham: Springer Nature Switzerland, 2023. |
| November 2022 | Saluja, Payal, Swati Jain, and Madhuri Bhavsar. "Machine Learning-Based Model for Effective Resource Provisioning in Cloud." <i>Futuristic Trends in Networks and Computing Technologies: Select Proceedings</i> |

- of *Fourth International Conference on FTNCT 2021*. Singapore: Springer Nature Singapore, 2022.
- November 2022 Prasad, Vivek Kumar, A. Raval Abhishek, and Madhuri Bhavsar. "HIDSC2: Host-Based Intrusion Detection System in Cloud Computing." *Inventive Communication and Computational Technologies: Proceedings of ICICCT 2022*. Singapore: Springer Nature Singapore, 2022. 71-85.
- July 2022 Prasad, Vivek Kumar, et al. "CSBRCA: Cloud Security Breaches and Its Root Cause Analysis." *Proceedings of Third International Conference on Computing, Communications, and Cyber-Security: IC4S 2021*. Singapore: Springer Nature Singapore, 2022.
- February 2022 Bakshi, Mahima Sandeep, Drashti Banker, Vivek Prasad, and Madhuri Bhavsar. "SMLHADC: Security Model for Load Harmonization and Anomaly Detection in Cloud." In *Internet of Things and Its Applications: Select Proceedings of ICIA 2020*, pp. 407-418. Singapore: Springer Nature Singapore, 2022.
- January 2021 Prasad, Vivek Kumar, Sudeep Tanwar, and Madhuri D. Bhavsar. "Advance Cloud Data Analytics for 5G Enabled IoT." *Blockchain for 5G-Enabled IoT*. Springer, Cham, 2021. 159-180. (Book Chapter)