



संगणक विज्ञान एवं अभियांत्रिकी विभाग

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

DoCSE NEWSLETTER JANUARY 2024, ISSUE-10



Department Vision

The vision of Computer Science and Engineering Department is to recognize itself as a globally renowned learning center in the field of Computer Science & Engineering and foster research and innovations for the global good.

Department Mission

The mission of Department of Computer Science and Engineering is to:

- Impart education that encourages students to read critically, reason analytically, communicate persuasively, apply professionally and prepare them to excel in the field of computing.
- Imbibe strong-willed attitude in the students, research scholars and its own community to use their knowledge and skill-sets for the improvement of the society, country, and global community.
- Provide education based on ethical values resulting in knowledge and skills valued by industry and society.
- Impart training and create an environment that enables students and faculty members alike to engage in lifelong learning and pursuit of knowledge.

Message from Head of the Department



Dr. Mukesh A. Zaveri

Professor & Head,
Department of Computer Science and
Engineering, SVNIT, Surat

“Year 2023 has ended with lots of new hops for the Department of Computer Science and Engineering for the next calendar year 2024. Institute conducted two drives for faculty recruitment and the department is able to recruit six new faculty members which has enriched teaching faculty members' strength of the department. Faculty members also got their due promotion in this drive. Internship is introduced in 8th semester and more than 60% students are able to secure internship in industry and 10% students are able to associate themselves with startups. Overall placement and salary package are the issue for the current academic year but Computer Science and Engineering students are able to secure placement through campus and it is 75% at the end of the year 2023 with an average salary package of 16 lacs. So, by the end of the current academic year more students will be placed. The department has published a good number of research papers in the last semester and the number of research proposals are also submitted to different agencies.

With best wishes to all, department faculty members, staff and students for the next calendar year in all aspects.”

Newly Joined Faculty Members



Dr. Ritu Tiwari

Professor

Research Area: Robotics, Artificial intelligence, Swarm Intelligence, Machine learning, Deep learning.



Dr. Abhilasha Chaudhuri

Assistant Professor

Research Area: Machine Learning, Feature Engineering, Dimensionality Reduction, Meta-heuristic Optimization, Classification of High-dimensional datasets, Named Data Networking



Dr. Chandra Prakash

Assistant Professor

Research Area: Artificial Intelligence, Motion Analysis, Robotics, Machine Learning, Deep Learning, Healthcare, Natural Language Processing



Dr. Naveen Kumar

Assistant Professor

Research Area: Named Data Networking, Network Security, P2P computing, Machine Learning, Meta-heuristics



Dr. Vishesh P. Gaikwad

Assistant Professor

Research Area: Information Security, Authentication and Key Agreement protocols in Telecare Medicine information system, Privacy Preserving in E-Healthcare, Machine Learning, Deep Learning

Student Achievements

AAFAQ IQBAL INAMDAR

(P19CO003)

Aafaq Iqbal Inamdar has been awarded the “ Best Paper Award” at 5thInternational Conference on Deep Learning, Artificial Intelligence and Robotics (ICDLAIR-2023) organized by National Institute of Technology, Kurukshetra, India during December 7-9, 2023



PhD Completed

Ms. PATIL SONAL PRAMOD (D17CO005)

Ms. Patil Sonal Pramod defended her Ph.D. thesis titled “Design and Analysis of Bioinspired CNN Architecture for Improving Forgery Detection in Images and Videos” in December 2023. She worked under the supervision of Dr. Krupa N. Jariwala.



Present Affiliation: Head of CSE-IT department, G H Rasoni Institute of Engineering and Business Management Jalgaon

Events Organized

Fourth International Conference on Computational Intelligence (ICCI 2023), November 4-5, 2023

The department organized 4th International Conference on Computational Intelligence (ICCI 2023) during November 4-5, 2023. The conference was technically sponsored by Soft Computing Research Society (SCRS). The after-conference proceeding will be published in Springer book series “Algorithms for Intelligence Systems”.

There were four keynote talks by eminent speakers like Prof. Rajat Moona (Director, IIT Gandhinagar), Prof. Radhakant Padhi (Professor, IISC Bangalore). Prof. Rajkumar Buyya (University of Melbourne, Australia) and Prof. Jin Kao Hao (University of Angers, France).



Second International Conference on Information Security, Privacy and Digital Forensics (ICISPD 2023) during December 15-16, 2023

As a part of MoU with National Forensic Sciences University (NFSU), the department jointly conducted Second International Conference on Security, Privacy and Digital Forensics (ICISPD 2023) during December 15-16, 2023. The conference was hosted by NFSU, Gandhinagar in collaboration with SVNIT Surat and NIT Goa. The after-conference proceeding will be published in Springer book series “Lecture Notes in Electrical Engineering”.

There were four keynote talks by eminent speakers like Prof. S.S. Iyengar (Professor, Florida International University, Miami), Prof. B.V. Buddhadev (Professor and HoD, Computer and IT at Government of Gujarat), Prof. K Chandrasekaran (Professor, NIT Surathkal), Prof. Vinod P (Professor, Cochin University, Kerala) and Dr. Pilli Emmanuel Shubhakar (Asso. Prof., MNIT Jaipur).



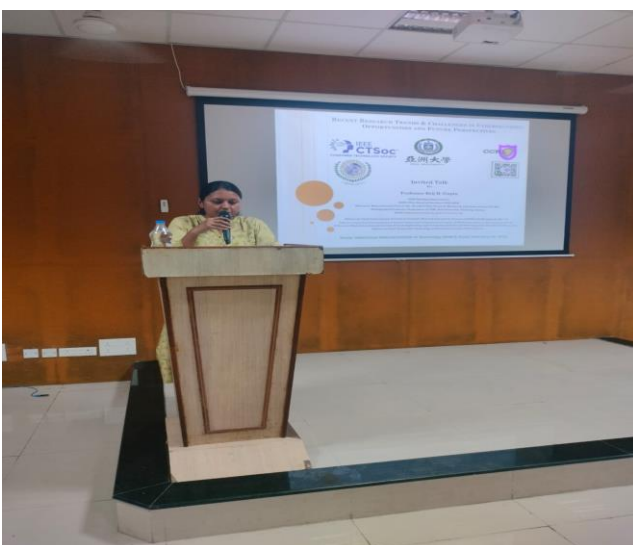
Publications

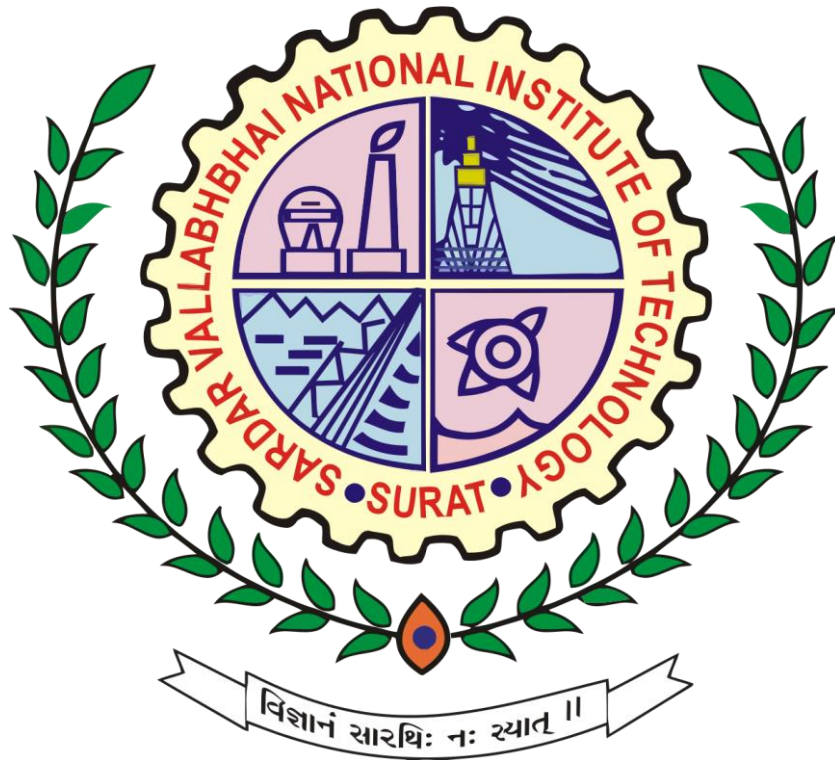
- ✚ J S Chaudhary, A. SONI, Mohit, N. Sharma, C.Prakash, A Pilot Study on Migraine Detection Using Computational Techniques, in Fifteenth International Conference on Contemporary Computing (IC3-23), 2023.
- ✚ Aharnish Sreenivasa, Ansh Kumar , Mohammad Shahanwaz, C.Prakash, Facial Emotion Recognition System Using Deep CNN For Rehabilitation With Hardware Integration, in Fifteenth International Conference on Contemporary Computing (IC3-23), 2023.
- ✚ D. Sethi , C. Prakash, Bharti, S. Joint Identification and Clustering using Deep Learning Techniques In 6th International Conference on Innovative Computing and Communication (ICICC 2023) , Springer Lecture Notes on Networks & Systems , 2023.
- ✚ R. Khade, A. Kalsekar, K. Jariwala and C. Chattopadhyay, "FLEXNet: Learning Deep Features Using Autoencoders for Floor Plan Image Retrieval," 2023 IEEE Guwahati Subsection Conference (GCON), Guwahati, India, pp. 01-06, July 2023
- ✚ Rasika Khade, Krupa Jariwala, Chiranjoy Chattopadhyay, "Autoencoders in Graphical Document Retrieval: Cost Function Influence and Rotation Impact" IEEE International Conference on Modelling Simulation & Intelligent Computing 2023 (IEEE Conference), 07-09 December 2023.
- ✚ Manali Patel, Krupa Jariwala and Chiranjoy Chattopadhyay, "Advancing Indian Stock Market Prediction with TRNet: A Graph Neural Network Model", International Conference on Modelling Simulation & Intelligent Computing (MoSiCom 2023), 07-09 December, 2023.
- ✚ Manali Patel, Krupa Jariwala and Chiranjoy Chattopadhyay, "MSNet: Momentum Spillover Network for Indian Stock Market Movement Prediction", 20th India Council International Conference (INDICON), 14-17 December, 2023

- ✚ Sagar Kavaiya, Dhaval K Patel, Mukesh Zaveri, Mehul S Raval, S.N. Merchant, "VeCEn: A Data Acquisition Framework for Heterogeneous Vehicular Networks," 2023 15th International Conference on COMMunication Systems & NETWORKS (COMSNETS), Bangalore, India, 2023, pp. 60-65, doi: 10.1109/COMSNETS56262.2023.10041287.
- ✚ Foram N. Shah, Dhaval K. Patel, Kashish D. Shah, Mehul S. Raval, Mukesh Zaveri, S.N. Merchant, "Novel Crash Prevention Framework for C-V2X using Deep Learning," 2023 15th International Conference on COMMunication Systems & NETWORKS (COMSNETS), Bangalore, India, 2023, pp. 7-12, doi: 10.1109/COMSNETS56262.2023.10041397.
- ✚ Prudvi Raj Gunemoni, Prarthana J Mehta, Balu L. Parne, Sankita J Patel, "PUF based Authentication and Key Agreement Framework for Internet of Drones" 20TH IEEE INDIA COUNCIL CONFERENCE (INDICON2023), December 14 – 17 CMRIT HYDERABAD, INDIA.
- ✚ Nidhi Joraviya, Bhavesh N. Gohil, Udai Pratap Rao, "DL-HIDS: Deep Learning-based Host Intrusion Detection System using System Calls-to-Image for Containerized Cloud Environment", Journal of Supercomputing, 2024(Scopus, SCI) (Accepted)
- ✚ Ashish R. Chaudhary, Bhavesh N. Gohil, Udai Pratap Rao, "A novel hybrid framework for Cloud Intrusion Detection System using system call sequence analysis", Journal of Cluster Computing, 2023 (Scopus, SCIE) (Accepted)
- ✚ Nishtha Srivastava, Bhavesh N. Gohil, "Ridership trend analysis and explainable taxi travel time prediction for Bangalore using e-hailing data", 7th Conference of the Transportation Research Group of India (CTRG2023), Dec. 17 - 20 2023, SVNIT Surat
- ✚ Sethi, D., Prakash, C. & Bharti, S. Estimation of lower extremity parameters for marker-less gait analysis. Multimed Tools Appl (2023). <https://doi.org/10.1007/s11042-023-17195-8> (SCIE, Impact factor 3.6)
- ✚ Vivek Kumar, Ananya Tripathi, Mukesh A. Zaveri, Dhaval K. Patel, "Priority-Based Optimal Routing for Intelligent Transportation System", In Proceedings of IEEE International Conference on Recent Advances in Systems Science and Engineering (IEEE RASSE 2023), November 8-11, 2023, Kerala, India.

Expert Talk Organized

The Department organized an expert talk on the topic “Recent Research Trends & Challenges in Cybersecurity: Opportunities and Future Perspectives” on 4th August 2023. The talk was delivered by Prof Brij B Gupta, Director, International Centre for AI and Cyber Security Research and Innovations and Distinguished Professor, Department of Computer Science and Information Engineering (CSIE), Asia University, Taiwan.





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