Newsletter

Message from Head of the Department

It is our pleasure to inform to all alumni and other stakeholders that the department is now named as the department of Computer Science and Engineering as per the resolution of 58th Board of Governors meeting. The department is also planning to propose various post graduate programs in the area of Data Science, Artificial Intelligence and Information Security & Privacy. The department has initiated the process for setting up the cyber security and forensic laboratory. The department has also planned to offer various programs like B.Tech. Minor, Post Graduate Diploma and Certification courses under the banner of Center for Inter-Disciplinary Education and Research (CIDER) in collaboration with other departments.

Department Mission

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

Department Vision

To recognize itself as globally renowned learning centre in the field of Computer Science & Engineering and foster the research and innovations for the global good.
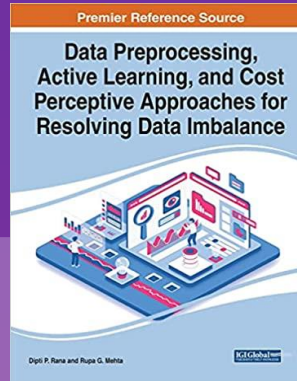
About the Department

Department of Computer Engineering had been setup with an intake of 30 students in the year 1988 under the Electronics Engineering Department of Sardar Vallabhbhai Regional College of Engineering and Technology (SVRCET) offering the bachelor of engineering in Computer Engineering. SVRCET became the institute of national importance and designated as National Institute of Technology in the year 2002. The Computer Engineering Department has its own individual department identity in the year 2002 and offering the degree bachelor of technology in Computer Engineering. The department has started offering PhD degree from the year 2005 and Post-graduation degree Master of Technology in Computer Engineering in 2006. The Master of Technology by Research M.Tech. (R) has been started in year 2007 to facilitate the higher education to working technical person in the industry and different organizations. The B.Tech. intake strength is 135 as on today. The B.Tech. Computer Engineering degree name has been changed to B.Tech. in Computer Science and Engineering 2019-20 onwards. The department name is now changed to the Department of Computer Science and Engineering as per the BoG notification vide letter No. C/ATR/BoG (58)/58.17/458 dated 22 July 2021. The department has various specializations like information security, data mining, social network analysis, cloud computing, privacy preserving, cyber security, image processing, computer vision, software engineering. The department has executed several research projects sponsored by different agencies like Department of Science and Technology, Ministry of Electronics and Information Technology, Indian Space Research Organization and Department of Science and Technology of Gujarat Government (GUJCOST). The department has also obtained the grant under Information Security Education and Awareness (ISEA) programme. The department is also beneficiary of TEQIP grant from phase I, II and III. The alumni of the department are now serving in various industries and few of them are entrepreneurs. The department is also planning to start the different specialization post graduate programmes in the area of Artificial Intelligence, Data Science and Information Security as a part of perspective development plan of the institute. The department has state of art computing desktop PCs, blade servers and super nodes for high performance computing. The department has availed two super nodes from C-DAC under the National Supercomputing Mission. The department has server wireless network simulator software and sensor motes. Different wireless sensor kits are also available in the department including aerial drones. Currently 40 number of students are pursing PhD degree. The department faculty members are very much involved with different academic activities and organized various short term training programmes for faculty members and students of other institutes. The department has also signed MoU with different industries. The faculty members have also filed patents for approval.

Faculty Achievement

Dr. Dipti P. Rana　　　　**Dr. Rupa G. Mehta**

Dr. Dipti P. Rana and Dr. Rupa Mehta published 1st edition of the book titled "Data Pre-processing, Active Learning, and Cost Perceptive Approaches for Resolving Data Imbalance" with IGI Global publisher in June, 2021.
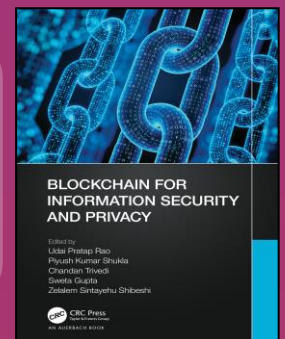
Dr. Udai Pratap Rao

Dr. Udai Pratap Rao has been elevated to the grade of IEEE Senior membership. This honor is bestowed only to those who have made significant contribution to the profession.

Dr. Udai Pratap Rao has received grant of Rs. 12.21 Lakhs from funding agency C3iHub IIT Kanpur on behalf of DST GoI for the research project titled Design and Implementation of Secure Service and Attribute-based Authorization Model in Dynamic and Constrained-specific IoT Environment vide Sanction Order No.: IHUB-NTIHAC/2021/01/8

Dr. Udai Pratap Rao has published 1st edition of the book titled "Blockchain for Information Security and Privacy." by CRC Press, Taylor and Francis Group, 2021. The book is jointly edited with Piyush Kumar Shukla, Chandan Trivedi, Sweta Gupta and Zelalem Sintayehu Shibshi.

Publications

Dhruti Sharma, Devesh C. Jinwala, "Simple index based symmetric searchable encryption with result verifiability" Frontiers Comput. Sci. Journal, 2021.

Unnati S. Shah, Sankita J. Patel, Devesh C. Jinwala, "Detecting Intra-Conflicts in Non-Functional Requirements" Int. J. Uncertain. Fuzziness Knowl. Based Syst, 2021.

Himanshu B. Patel, Devesh C. Jinwala, "6MID Mircochain based Intrusion Detection for 6LoWPAN based IoT networks" Procedia Computer Science, 2021.

Jenish Dhanai, Rupa G. Mehta, Dipti P. Rana, "Legal Document Recommendation System: A Dictionary based Approach", International Journal of Web Information Systems, Emerald Publishing, 2021.

Shivaji R. Lahane, Krupa N. Jariwala, "A Novel Cross-Layer Cross-Domain Routing Model and its Optimization for Cluster-Based Dense WSN", Wireless Personal Communications, 2021.

Shivaji R. Lahane, Krupa N. Jariwala, " Integrating Beetle Swarm Optimization in Cross Layer Design Routing Protocol to improve Quality of Service in Clustered WSN ", Ad Hoc & Sensor Wireless Networks, Old City Publication, ISSN: 1551-9899 (Online), DoA: 30th May, 2021.

Shivaji R. Lahane, Krupa N. Jariwala, "Dynamic Source Routing Techniques in Wireless Sensor Network", Journal of Huazhong University of Science and Technology, ISSN: 1671-4512, Volume 50, Issue 6, June 2021.

Rasika Khade, Krupa N. Jariwala, Chiranjoy Chattopadhyay, Umapada Pal, "A Rotation and Scale Invariant Approach for Multi-oriented Floor Plan Image Retrieval", Pattern Recognition Letters, Elsevier 2021.

Anjali S. More, Dipti P. Rana, "Performance Enrichment through Parameter Tuning of Random Forest Classification for Imbalanced Data Applications", Materials-today-proceeding (Elsevier), Accepted: 10 July, 2021.

Nikunj Domadiya, Udai Pratap Rao, "Improving Healthcare Services using Source Anonymous Scheme with Privacy Preserving Distributed Healthcare Data Collection and Mining", Computing, 2021.

Shubham Gupta, Balu L. Parne, and N.S. Chaudhari, "ISAG: IoT-enabled and Secrecy Aware Group-based handover scheme for e-health services in M2M communication network", Future Generation Computer Systems, Elsevier, 2021.

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, 2021.

Student Achievement

Eshan Arora(U17CO017) has successfully completed the Google Summer of Code program 2021 for his contribution to the open source project Python Software foundation during June 7, 2021 to August 23, 2021. The project title was "Automatic Generation of Schema.

Dholikya Bhavik Prashantbhai(U20CS001) has obtained AIR3 for his outstanding performance in National Engineering Olympiad (NEO 4.0) in the category of First year Engineering conducted in July 2021.

Project Proposal for Pipe Climbing Robots category for ROBOFEST – Gujarat 2.0 competition by Neel Majethiya(U19CS014) and other students was selected for the proof of concept stage by Gujarat Council on Science and Technology, Govt. of Gujarat.

Expert Lectures Delivered by Faculty Members

Prof. Devesh C. Jinwala delivered talk on "Denial of Service Attacks on the RPL Routing Protocol in 6LowPAN in the IoT Systems" at TEQIP-III Sponsored FDP on Modern Cryptography, Blockchain & IoT Security : Challenges, Solutions & Future Prospects, University Institute of Technology at Rajiv Gandhi Proudyogiki Vishwavidyalaya, Bhopal, 25th– 26th march, 2021.

Prof. Devesh C. Jinwala delivered talk on "Security Issues in the Cyber Physical Systems and the Internet of Things" at AICTE ATAL Online Five Days Faculty Development Program (FDP) on Internet of Things, GCET, Vallabh Vidhyanagar, 7th June, 2021.

Prof. Devesh C. Jinwala delivered talk on "Blockchain of Things: Applications, Security and Privacy Issues" at AICTE approved STTP on the Internet of Things, CSPIT, CHARUSAT, Changa, 18thJune, 2021.

Dr. Udai Pratap Rao delivered talk on "Mathematics of Cryptography" at 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, Bhopal on 26th March, 2021.

Dr. Bhavesh N. Gohil delivered talk on "Security awareness in emerging technologies of IT" at ISTE Students' Chapter GJ05 and LEC Morbi, 26th Jun, 2021.

Dr. Bhavesh N. Gohil delivered talk on "Understanding the paper review process" at RNGPIT, Bardoli, 3rd May, 2021.

Dr. Keyur J. Parmar delivered talk on "The Double Spend Problem" at One week Faculty Development Program (FDP) on Blockchain: A Disruptive Technology, AICTE Training and Learning (ATAL) Academy, Pandit Deendayal Energy University (PDEU), Gandhinagar, 4th July, 2021.

Dr. Udai Pratap Rao delivered talk on "Mathematical Background of Lightweight Cryptography" at 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
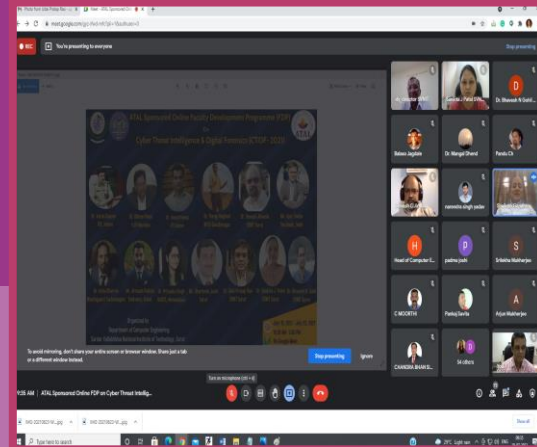
New Recruitment Faculty

Dr. Alok Kumar

Ph.D. : NIT, Karnataka.
Area of Interest: Wireless Sensor Networks, IoT, Information/Network Security and Blockchain.
Email : akumar@coed.svnit.ac.in, alok_21@outlook.com
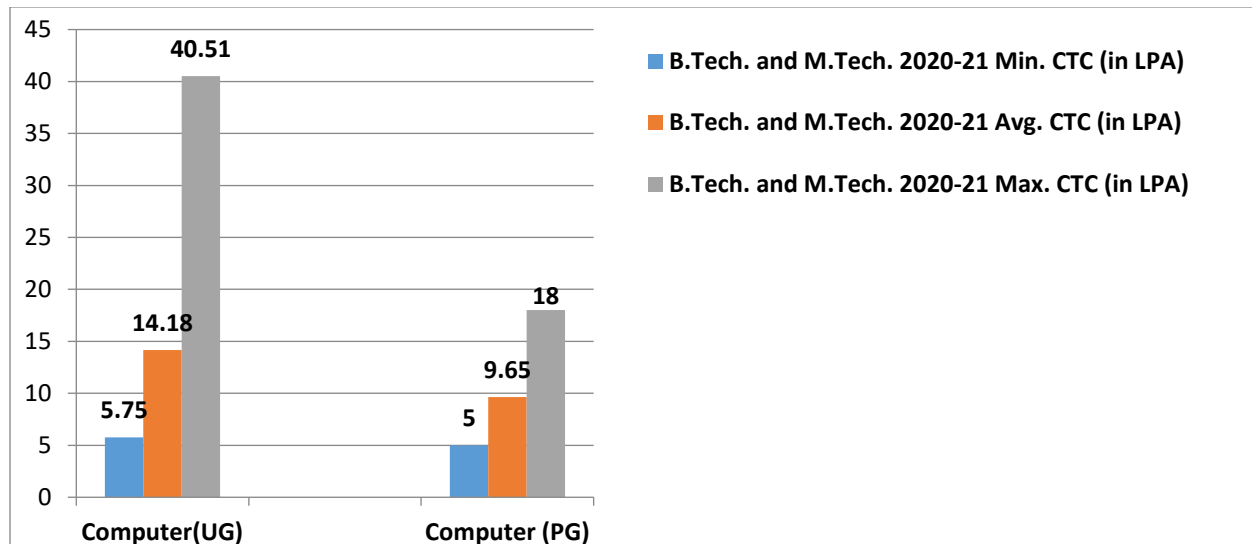
STTP/Workshop/Seminar Organized

The department inaugurated an online AICTE Training And Learning Academy (ATAL) sponsored FDP on Cyber Threat Intelligence and Digital Forensics (CTIDF 2021) on 19th July 2021. The FDP was conducted for one week, from 19th to 23rd July 2021. The inaugural function was graced by honourable Director Prof. S. R. Gandhi, Deputy Director Prof. P. L. Patel, Dean(R & C) Prof. D. C. Jinwala, and Head of Department (CSE) Prof. Mukesh A. Zaveri. All the guests appreciated the topics of FDP as this area is very emerging now-a-days. They also gave kudos to coordinators Dr. U. P. Rao, Dr. S. J. Patel, and Dr. B. N. Gohil for organizing this FDP. We have seen much news related to digital fraud & cybercrime. This FDP aimed to provide more insights towards the knowledge of forensics tools & cyber threat analysis. The speakers were invited from the reputed industry as well as academia from across the globe.

Major Companies Hiring from Computer Science and Engineering

J.P.Morgan	Deshaw	Nutanix	lowes	Amazon
Fanatics	Cradit Suisse	GEP	Airtel / X-labs	Avalara
Arcesium	UHG	Accenture	Meesho	Zohn Deere
Bank of America	Lentra AI	Delhivery	Crest Data Systems	MAQ
Paytm	Deloitte	Visilean	Oracal	Publics Sapient
HSBC	Master Card	UGAM	Commvault	AIDash
Google	TCS Innovator	Intel	Cognizant	Zoom Video Communications

Salary Statistics of B.Tech. and M.Tech. Students

Legend:
- ■ B.Tech. and M.Tech. 2020-21 Min. CTC (in LPA)
- ■ B.Tech. and M.Tech. 2020-21 Avg. CTC (in LPA)
- ■ B.Tech. and M.Tech. 2020-21 Max. CTC (in LPA)

Computer(UG): 5.75, 14.18, 40.51
Computer (PG): 5, 9.65, 18

Placement data for Computer Science and Engineering - Batch 2020-21		
Particular	UG (B.Tech)	PG (M.Tech)
Total no. of Students	101	15
Eligible Students	99	15
Placed Student	89	14

Department of Computer Science and Engineering

Sardar Vallabhbhai National Institute of Technology

Ichchhanath, Surat - 395007