



SVNIT

COMPUTER ENGINEERING DEPARTMENT

Issue – 3

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Newsletter



Department Mission

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

The vision of Computer Engineering Department is 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.

SVNIT

Department of Computer Engineering

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Faculty Awards & Achievements



Prof. Devesh C. Jinwala continues to serve as the Dean (Faculty Affairs) and the Adjunct Professor at IIT Jammu. He is serving also as the senate member and invitee member of Board of Governors (BOG) at IIT Jammu. He is also appointed as the Professor In-Charge (International Collaboration) SVNIT, Surat.



Dr. Keyur Parmar received Seed Money/Research Grant of Rs. 9,30,000/- for a research project proposal titled "Design and Analysis of Secure and Efficient Smart Contracts Using Blockchain Technology" from SVNIT, Surat.



Dr. Balu. L. Parne received the Seed Money/Research Grant of Rs. 9,20,000/- for a research project proposal titled "Blockchain-enabled public key infrastructure based solution for the Internet of Things (IoT)" from SVNIT, Surat.

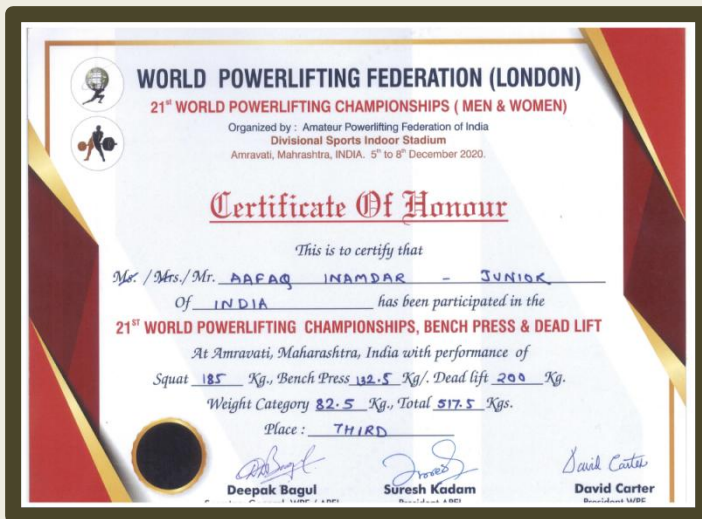


Dr. Dipti. P. Rana has attended the "Virtual global summit on Artificial Intelligence: Responsible AI for Social Empowerment (RAISE2020)", by Ministry of Electronics & IT, Government of India during Oct 5-9



Dr. U. P. Rao has completed 8 weeks online course on "Blockchain Basics" at Coursera during June-July 2020.

Student Achievements



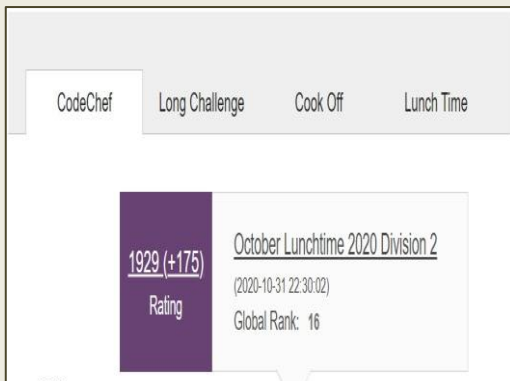
AFAQ INAMDAR (P19CO003), student of M.Tech-II has won 21st World Power Lifting championship held during 4-8 December, 2020 at Amravati, Maharashtra India. He secured 2 Gold medals and 1 Bronze medal under 23 age (Youth), under 83kg weight class.

A Research paper titled "PPSE: Privacy Preservation and Security Efficient AKA Protocol for 5G Communication Networks" by **KANEESHA GANDHI (U17CO002)**, student of B.Tech-IV, got selected for the IEEE International Conference on Advanced Networks and Telecommunications Systems, 2020. It will be published in IEEE Xplore and indexed in SCOPUS, Google Scholar, and other major indexing.

A Research paper titled "p2pTraf: An Open library implementing p2p vehicular network for preliminary real-field experiments" by **HRISHABH SHARMA(U17CO094)**, student of B.Tech.-IV, got selected at ITS Workshop: COMSNETS 2021, under the guidance of Dr. Shriniwas Arkatkar, Associate Professor, Civil Engineering Department, SVNIT, Surat.

A Research paper titled "p2pTraf: An Open library implementing p2p vehicular network for preliminary real-field experiments" by **UJJWAL KUMAR(U17CO089)**, student of B.Tech.-IV, got selected at ITS Workshop: COMSNETS 2021, under the guidance of Dr. Shriniwas Arkatkar, Associate Professor, Civil Engineering Department, SVNIT, Surat.

ABHISAR WAGHMARE (U17CO078), student of B.Tech.-IV, Co-founded I-Stem (<https://www.inclusivestem.org/>), which recently received a lot many awards internationally and also grants from organizations like Microsoft and United Nations envoy.



CodeChef is one of the biggest community of competitive coders from across the globe. It is an online platform where many competitive coding competitions are organized by various universities, organizations and CodeChef itself is one of them. There are 3 competitive coding challenges organized by CodeChef on their platform every month for coders all over the globe. These are popularly known as Monthly Long Challenge,

Monthly Cook-Off Challenge and Monthly Lunchtime Challenge. **Karan Mashru (U18CO043)**, student of B.Tech.-III secured Global Rank of 16 and India Rank of 9 out of around 5.7K total participants with a perfect score of 500/500 in CodeChef.



Sahil Nare (U18CO071), student of B.Tech.-III secured 4th position in Version Beta Hackthon held from 30th October to 1st November 2020, organized by the Indian Society for Technical Education Students' in MANIT, Allahabad.



Nikhil Gautam (U18CO053), student of B.Tech.-III secured 4th position in Version Beta Hackthon held from 30th October to 1st November 2020, organized by the Indian Society for Technical Education Students' in MANIT, Allahabad.



Meet Sony (U18CO075), student of B.Tech.-III secured 4th position in Version Beta Hackthon held from 30th October to 1st November 2020, organized by the Indian Society for Technical Education Students' in MANIT, Allahabad.

Expert Lectures Delivered by Faculty Members

1.	Dr. Mukesh A. Zaveri delivered talk on "Introduction to AI & ML" during FDP on Artificial Intelligence (1-5 October, 2020) sponsored by AICTE Training And Learning (ATAL) Academy organized by Department of Computer Science and Engineering, Motilal Nehru National Institute of Technology, Allahabad, Prayagraj, U.P. on 1 October 2020.
2.	Dr. Mukesh A. Zaveri delivered talk on "Neural Networks and its Applications" during FDP on Artificial Intelligence (1-5 October, 2020) sponsored by AICTE Training And Learning (ATAL) Academy organized by Department of Computer Science and Engineering, Motilal Nehru National Institute of Technology, Allahabad, Prayagraj, UP on 2 October 2020.
3.	Dr. Bhavesh N. Gohil delivered talk on "Basics of Cloud Computing using AWS" during Five days National level workshop on "Emerging Tools & Technology in Cloud Computing: AWS, VMWARE & AZURE" organized by SPCE, Anand and sponsored by GUJCOST, 2nd November, 2020.
4.	Dr. Udai Pratap Rao Deliverd talk on "Privacy Issue in LBS", AICTE sponsored STTP on Cyber Security- Current Trends and Future Perspective during 9-14 Nov 2020 and served as a Keynote Spiker.
5.	Prof. Devesh C. Jinwala delivered talk on "What is Research and Writing Research Papers: Writing Style and Mistakes to Avoid" at ATAL FDP on Research Methodology, organized by the Indian Institute of Information Technology, Nagpur on 2 nd Dec 2020.
6.	Dr. Keyur J. Parmar delivered talk at GUJCOST sponsored online STTP on Cyber Security and Blockchain Technologies at the Department of Computer Engg, VVP Engg College, Rajkot, Gujarat from 14-Dec-2020 to 19-Dec-2020.
7.	Dr. Keyur J. Parmar delivered talk at TEQIP-III Sponsored One Week ONLINE Short Term Training Programme (STTP) On Blockchain Technology and Its Applications in Internet of Things (BTIoT-2020) at COED, SVNIT from 7 th to 11 th December, 2020.
8.	Dr. Mukesh A. Zaveri delivered talk on "Signal / Bayesian Estimation using AI: Artificial Intelligence and Bayesian Network" during STTP on Artificial Intelligence for Signal Processing Applications (22-26 December, 2020) sponsored by Gujarat Council on Science and Technology, Department of Science and Technology, Government of Gujarat and IEEE Signal Processing Society, Gujarat Chapter organized by E & C Department



Publications

1.	Dhruti Sharma, Devesh C. Jinwala. "Simple index based symmetric searchable encryption with result verifiability". <i>Frontiers Comput. Sci.</i> (2021).
2.	Mukti Padhya, Devesh C. Jinwala R-OO-KASE: Revocable Online/Offline Key Aggregate searchable encryption". <i>Data Sci.</i> (2020).
3.	Mukti Padhya, Devesh C. Jinwala. "P2 KASE A2 – Privacy-Preserving key Aggregate Searchable Encryption Supporting Authentication and Access Control on Multi delegation". <i>IET Information Security</i> (2020).
4.	Nikunj Domadiya, Udai Pratap Rao. "Improving Healthcare Services using Source Anonymous Scheme with Privacy Preserving Distributed Healthcare Data Collaction and mining". <i>Computing, Springer</i> , (2020).
5.	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", <i>Mathematics</i> , 2020.(SCI Indexed).
6.	Maulik Chevli, Niravkumar Talaviya, and Mukesh A. Zaveri. "Super-Resoulution: A zero Shot Approach for images with Non-Idea Degradation", <i>Proceedings of 2nd International Conference (Digital) on Research and Innovations in science, Engineering and Technology (ICRISET-2020) 4-5 September 2020, Vallabh, Vidhyanagar, Gujrat, India.</i>
7.	Alice Anjali Tiriya and Mukesh A. Zaveri. "Human Behavior Classification Video Surveillance using CNN", <i>Proceeding of 2nd IEEE International Conference on Advances in Computing communications Control and Networking, 2020(ICAC3N-20) 18-19 December 2020, Galgotias Collage of engineering and Technology, Greater Noida, Uttar Pradas, India.</i>
8.	Shubham Gupta, Kaneesha Gandhi, Shubhangi Meena and Balu L. Parne. "PPSE: Privacy Preservation and Security Efficient AKA Protocol for 5G Communication Networks". Accepted for publication at <i>IEEE International Conference Advanced Networks and Telecommunication System (ANTS-2020).</i>

PhD Completed



Mr. Kamalkumar Macwan (D15CO002) defended his PhD thesis titled "Privacy Preserving Data Publishing Approaches for Online Social Networks" on 4th November-2020. He worked under the supervision of Dr. Sankita J. Patel, Assistant Professor, Computer Engineering Department.



STTP/Workshop Organized

1. TEQIP-III Sponsored Short Term Training Program on “Data Security and Privacy (DSP 2020)” was jointly organized by Computer Engineering Department, SVNIT Surat & Computer Science and Engineering Department, MMMUT Gorakhpur during 23-27 October, 2020. **(Coordinators: Dr. Udai Pratap Rao, Dr. Rakesh Kumar, Dr. Balu L. Parne, Dr. Keyur J. Parmar)**

Brief Details:

The objective of the programme was to motivate participants with real world problems in the area of data security and privacy. Total 48 participants were registered including Faculty Members, PhD Scholars and M.Tech Students. The training program brought together academicians, industry participants, researchers, and young UG/PG/PhD scholars to share and learn the state-of-the-art research topics in the area of data security and privacy.

Eminent experts from reputed institutions and industries such as IITs, NITs, Reliance Jio Infocomm. Ltd. (RJIL), etc. were invited to share their expertise.

Various topics covered in this programme were Demystifying Edge AI Paradigm, Design for data privacy in peer to peer networks, Encryption Domain Processing and its Applications, Blockchain and Cyber-physical Systems: Opportunities and Challenges, Location-Based Privacy Using Differential Privacy, Cloud Security and

Blockchain, Introduction to Machine Learning and Applications to Malware Detection System, Privacy Preserving Approaches for Location-based Services, Scalable Anonymization Approaches for Privacy Preserving Big Data Publishing, Navigating Data Privacy, White Box Cryptography Applications and Countermeasure of Various Attacks, Security and Privacy in Mobile Network.

2. TEQIP-III Sponsored One Week ONLINE Short Term Training Program on “Blockchain Technology and it’s Application in Internet of Things (BTIoT-2020)” was organized during 7-11 December, 2020. **(Coordinators: Dr. Balu L. Parne, Dr. Keyur J. Parmar, Dr. Udai Pratap Rao)**

Brief Details:

The objective of this programme was to motivate participants with real world problems in the area of Blockchain technology and Internet of Things, and how these two areas can solve the real-world issues in the domain of agriculture, healthcare, finance, supply-chain etc. Total 44 participants were registered

including Faculty Members, PhD Scholars and UG/PG Students. The training program brought together

academicians, industry participants, researchers, and young UG/PG/PhD scholars to share and learn the state-of-the-art research topics in the area of Blockchain technology and Internet of Things.

Eminent scholars from reputed institutions and industries such as IITs, NITs, HSBC (London, UK and Pune), Santa Clara University (USA), etc. were invited to share their expertise.

Various topics covered in this programme were Blockchain and DLT, Blockchain-Unlocking the Potential in Financial Services, The Double Spend Problem, Blockchain in Healthcare, IoT in Agriculture, Blockchain Technology & Application to IoT, Ethics in Blockchain Research, Blockchain, variants like Ethereum, Monero and its Applications, IoT Trust Management, Blockchain Architecture Block and Transaction Structure, Blockchain Interoperability, Industry Perspective on Cyber-security, Blockchain for IoT Devices, Use cases of Blockchain for IoT Environment, etc.

3. TEQIP-III Sponsored One Week ONLINE Short Term Training Program on “Cyber Security and Penetration Testing (CSPT 2020)” 28th December 2020 to 1st January 2021. **(Coordinators: Dr. Bhavesh N. Gohil, Dr. Sankita J. Patel)**

Brief Details:

The objective of the program was to train the participants in the area of Cyber Security and Penetration Testing. Total 79 participants were registered including Faculty Members, UG/PG/PhD students and Industry persons. Eminent speakers from IIT, IIIT, National Forensics Sciences University, Rashtriya Raksha University, HSBC Pune, Cyber Expert and Lawyer from Surat, AWS solution architect were invited to share their expertise in the field.

Various topics covered in this program were Cyber Security: A Systematic Approach, Android Mobile Application Security Penetration Testing, Privacy and Security in Online Social Media, Cyber Laws, OTT Platforms, Social Media Crimes, Network Forensics, Memory Forensics, Cloud Computing Essentials, Cloud Security Architecture, Software and Web Application Security, Security Certification and Career Paths etc.



GitHub campus program



INCUBATE IND CODE INNOVATION SERIES powered by GitHub

Sardar Vallabhbhai National Institute of Technology

GitHub Hands on Workshop

Kaushik Roy
Principal Architect
IncubateIND

19/12/2020 (01:00 PM - 02:00 PM)

REGISTER FOR WORKSHOP <https://bit.ly/githubsvnit>



INCUBATE IND CODE INNOVATION SERIES powered by GitHub

Sardar Vallabhbhai National Institute of Technology

CODE INNOVATION SERIES
powered by GitHub

Hack Day 25 DEC 2020

<https://incubateind.com/cis>

Code Innovation Series creates an open source platform for 25+ colleges & students across India to ignite the passion amongst students to build a better world around us and support Open Source.

Institute has recently become the partner of GitHub campus program. GitHub is a code hosting platform for version control and collaboration. GitHub allows developers to work together on different projects from anywhere. As a part of this Mr. Kaushik Roy (Principal architect, IncubateIND) conducted “GitHub hands on Workshop” on 19th December 2020.

Total 354 Participants where registered for GitHub hands on Workshop and total 91 participants where registered for GitHub code innovation series.

Alumni Information

Name of Student	Designation	Batch Year	Company Name
Mehak	Graduate analyst	2016 - 2020	Ugam
Nikunj Khokhar	Software Engineer	2016 - 2020	D. E. Shaw India Private Ltd.
Avinash	Software Engineer	2016 - 2020	Gojek
Kikani Brijeshkumar Kantibhai	Software Engineer	2016 - 2020	Samsung Research Institute
Sourabh Varshney	Member Technical	2016 - 2020	D. E. Shaw India Private Ltd.
Pratibha masar	Intern	2016 - 2020	SpiderG gladiris private limited
Mayank Kumar	Software Engineering Associate	2016 - 2020	AMDOCS DEVELOPMENT CENTRE INDIA LLP
Akanksha Bhandar	Software Engineer	2016 - 2020	MAQ Software
Vinod Kumar Sonkar	Graduate Engineer Trainee	2016 - 2020	Tata Power
Amogh grawal	Software Engineer	2016 - 2020	SAMSUNG



Network and Security Lab



High Performance Computing Lab



Computing Lab-1



Computing Lab-2

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