

## International Conference on Security, Privacy and Data Analytics (ISPDA-2021) December 13-15, 2021





# Organized by Department of Computer Science and Engineering Sardar Vallabhbhai National Institute of Technology, Surat-India (ONLINE mode)

### **Conference Schedule**

Google Meet Link:https://meet.google.com/onx-wjfk-sai

<u>DAY – 1 (13<sup>th</sup> December 2021)</u>			
Time (IST)	Inaugural Function Moderator: Ms. Hiral Trivedi, Ms. Nidhi Joraviya		
8:30 am to 9:00 am	Welcome Address About Conference About Department About Security Research at CSE Address by Dy. Director Address by Director Address by Chief Guest Vote of Thanks   Dr. Sankita J. Patel Dr. Udai Pratap Rao, Dr. Pethuru Raj Prof. M A Zaveri, Head, CSE Prof. D C Jinwala, Professor, CSE Prof. P L Patel Prof. R V Rao Security Research Sharma, General Manager, GitHub, Delhi, India Dr. Bhavesh N. Gohil		

Keynote Talks Moderator: Dr. Udai Pratap Rao, Mr. Vivek Champaneria			
Time (IST)	Name of Speakers & Title		
9:00 am to 10:00 am	Keynote Talk 1: Prof. Mohammad Obaidat, IEEE Fellow and SCS Fellow, Founding Dean and Professor, College of Computing & Informatics, University of Sharjah, UAE.  Title of the Talk: Recent Research Efforts on Machine Learning		
Keynote Talk 2: Prof. Saraju Mohanty, Department of Computer Science and Engineering, University of North Texa Denton, USA.  Title of the Talk: Security by Design for IoT- Enabled Systems			
11:15 am to 11:30 am	am TEA BREAK		

Paper Presentation Session 1 (15 mins for each presentation including Q&A) Session Chair: Prof. Mukesh A. Zaveri, Dr. Satya Prakash Sahu Moderator: Mr. Himanshu Gajera

	Paper ID	Authors Details	Title of Papers
11:30 am to 12:30 pm	24	S Prabhakaran, R Annieuthra and J Preetharoselyn	Defect Analysis of Faulty Regions in Photovoltaic Panels using Deep Learning Method
	41	Vikash Kumar, Ashish Ranjan, Md Shah Fahad and Akshay Deepak	Media House Bias Prediction using Deep Learning Framework
	43	Md Shah Fahad, Raushan Raj, Ashish Ranjan and Akshay Deepak	Hindi Songs Genre Classification using Deep Learning
12:30 pm to 2:00 pm	LUNCH BREAK		

### **Paper Presentation Session 2** (15 mins for each presentation including Q&A)

### Session Chair: Dr. Rupa G. Mehta, Dr. Alok Kumar

Moderator: Ms. Hiral S. Trivedi

	Paper ID	Authors Details	Title of Papers
2:00 pm to 3:00 pm	44	Md Shah Fahad, Aparna Juhi, Shambhavi K, Ashish Ranjan and Akshay Deepak	Multi-model Emotion Recognition using Hybrid Framework of Deep and Machine Learning
	50	Bhuvaneswari Amma N.G.	Network Traffic Classification using Deep Autonomous Learning Approach
	53	Gurdeep Saini, Naveen Yadav and Sowmya Kamath S	Ensemble Neural Models for Depressive Tendency Prediction based on Social Media Activity of Twitter Users
	54	Shraddha Suratkar and Purv Sharma	A Simple and Effective Way to Detect DeepFakes: Using 2D and 3D CNN
3:00 pm to 3:30 pm	TEA BREAK		
3:30 pm to 5:00 pm	Tutorial Session 1 by Dr. Ashu Sharma (Watchguard Tech.) Topic - Evolution of Malware and its Detection Techniques Moderator: Ms. Shivangi Shukla		
DAY – 2 (14 <sup>th</sup> December 2021)			

### **Keynote Talks** Moderator: Dr. Sankita J. Patel, Ms. Prarthana Mehta

Time (IST) Name of Speakers & Title Keynote Talk 3: Prof. Danda B. Rawat, Department of Electrical Engineering & Computer Science, Howard University, Washington, DC, 20059, USA. 9:00 am to 10:00 am Title of the Talk: Cybersecurity for Artificial Intelligence and Artificial Intelligence for Cybersecurity: The Triumph and **Tribulation** 

10:00 am to 11:00 am	Keynote Talk 4: Dr. George Trawick, Associate Professor, Mississippi State University, United States  Title of the Talk: The Cyber Security Executive Order (14028) It's a Big Deal
11:00 am to 11:15 am	TEA BREAK

## Paper Presentation Session 3 (15 mins for each presentation including Q&A) Session Chair: Dr. Balu L. Parne, Dr. Chirag Modi Moderator: Mr. Ashish Chaudhary

	Paper ID	Authors Details	Title of Papers
11:15 am to 12:30 pm	15	Jhanvi Uday and Mohona Ghosh	Safeguarding Geo-Location for Social Media with Local Differential Privacy and I-Diversity
	16	Anupam Khan	Detection of False Data Injection Cyber Attack in Smart Grid by Convolutional Neural Network based Deep Learning Technique
	30	Milind Daftari	Leveraging a Honeypot Router for Discovering and Characterizing Attacks on Routers
	36	Vinita Verma, Sunil K. Muttoo and V. B. Singh	Detecting Stegomalware: Malicious Image Steganography and its Intrusion in Windows
	51	Amar Khade and Jibi Abraham	Security Solutions on KVM Hypervisor for Early Detection of DoS Attacks on Cloud Servers
12:30 pm to 2:00 pm	LUNCH BREAK		

Keynote Talk Moderator: Dr. Udai Pratap Rao, Mr. Akhil Chaurasia

Time (IST)	Name of Speakers & Title			
2:00 pm to 3:00 pm	Keynote Talk 5: Prof. Sandeep K. Shukla, Department of Computer Science and Engineering (CSE), IIT Kanpur.  Title of the Talk: OT/ICS Security – Rising Challenges and Mitigations			
Paper Presentation Session 4 (15 mins for each presentation including Q&A) Session Chair: Dr. Reema Patel, Dr. Govind Gupta Moderator: Ms. Shivangi Shukla				
	Paper ID	Authors Details	Title of Papers	
	52	Palak Desai and Devendra Thakor	Privacy Preservation Techniques and Models for Publishing Structured Data	
3:00 pm to 4:00 pm	58	Ankur Bang, Udai Pratap Rao, Pethuru Raj and Alok Kumar	White-Box Encryption Scheme for Resource-constrained IoT Devices	
	70	Keval Pandya, Bhavesh Borisaniya and Bharat Buddhdev	ShoutIMEI: Ultrasound Covert Channel Based Attack in Android	
	72	Nishtha Srivastava, Ashish Chaudhari, Nidhi Joraviya, Bhavesh Gohil, Suprio Ray and U P Rao	A Review on Machine Learning Approaches for Intrusion Detection System in the Cloud	
4:00 pm to 4:15 pm		TEA BREAK		
4:15 pm – Onwards	Poster Presentation Session Moderator: Mr. Jagdish Vanara			
<u>DAY – 3 (15<sup>th</sup> December 2021)</u>				
Keynote Talk Moderator: Dr. Bhavesh N. Gohil, Ms. Nidhi Joraviya				
Time (IST)	Name of Speaker & Title			

10:00am to 11:00am	Keynote Talk 6: Dr. Ashish Kundu, Head of Cyber security Research at Cisco Research, USA.  Title of the Talk: Blockchain and The Vedas Connection			
Paper Presentation Session 5 (15 mins for each presentation including Q&A) Session Chair: Dr. Pethuru Raj, Dr. Vivaksha Jariwala Moderator: Mr. Jignesh Joshi				
	Paper ID	Authors Details	Title of Papers	
12:15 pm to 1:30 pm	10	Alok Jaiswal, Sheetal Chandel, Ajit Muzumdar, Chirag Modi, Madhu G. M. and C Vyjayanthi	NITG Chain: A Scalable, Private and Permissioned Blockchain with Proof of Reputation Consensus Method	
	39	Sudersan S, Abhijith V S, Thangavel M and Varalakshmi P	A Review on Data Integrity Verification Schemes based on TPA and Blockchain for Secure Cloud Data Storage	
	45	Rishikesh Choudhari, Shivukumar M, Shreyas Nandavar, Shruti Maigur, Saroja Siddamal, Suneeta Budihal and Shrishail Pattanshetti	Decentralized and Secured Voting System with Blockchain Technology	
	56	Suryansh Raj Singh, Harsh Mithaiwala, Nirav Chauhan, Parth Shah, Chandan Trivedi and Udai Pratap Rao	Decentralized Blockchain based Framework for Securing Review System	
	62	Kunal Sahitya and Bhavesh Borisaniya	Pay-Per-Byte for Block Reward: A Revised Incentive Mechanism in Bitcoin	
1:30 pm to 2:00 pm	LUNCH BREAK			
2:00 pm to 3:30 pm	Tutorial Session 2 by Mr. Nilay Mistry (NFSU Gandhinagar) Topic - Investigations through Online Social Intelligence Moderator: Mr. Ashish Chaudhary			
3:30 pm to 03:45 pm	TEA BREAK			

## Paper Presentation Session 6 (15 mins for each presentation including Q&A) Session Chair: Dr. Kamal Macwan, Dr. Nikunj Domadiya

	Paper ID	Authors Details	Title of Papers
3:45 pm to 4:45 pm	22	Hrishabh Sharma, Ujjwal Kumar, Amruta Mulay, Rishabh Kumar and Sankita J. Patel	Democratic After-Market for Domain Names
	32	Vensila C and Boyed Wesley A	Multimodal Biometric Authentication using Watermarking Technique
	35	SahilNande, Saail Ganesh, Santosh Krishnan and Kalyani Pampattiwar	Image Deblurring for CCTV Captured Images of Fast- Moving Vehicles
	63	Yash Solanki, Soumya and Reema Patel	Blockchain-Based Regulation System
4:45 pm – Onwards	Valedictory Function and Vote of Thanks		