

## ICISS 2023

### The 19th International Conference on Information Systems Security

ICISS

**Day 1**  
Dec-16  
(Saturday)

Time	Session	Presenter	Title
09:00-09:30	REGISTRATION		
09:30-10:00	Inaguration	Director, NIT Raipur	Opening remarks by RK Shyamasundar (General Chair), followed by Inauguration ceremony
10:00-11:00	<b>Keynote 1</b>	<b>Nishanth Chandran</b> Microsoft Research	<b>How to Train and Use AI Models on Sensitive Data without Compromising Privacy?</b>
11:00-11:30	(TEA BREAK)	---	---
11:30-12:30	Session S1 (Systems Security) Session chair: TBA	Paper-ID-17f Paper-ID-25f	A Security Analysis of Password Managers on Android The Design and Application of a Unified Ontology for Cyber Security
12:30-14:00	(LUNCH BREAK)	---	---
14:00-15:20	Session S2 (Systems Security) Session chair: TBA	Paper-ID-36f Paper-ID-103f Paper-ID-66s	Big Data Forensics on Apache Kafka A Survey on Security Threats and Mitigation Strategies for NoSQL Databases MongoDB as a Use Case Theoretical Enumeration of Deployable Single-output Strong PUF Instances based on Uniformity and Uniqueness Constraints
15:20-15:40	(TEA BREAK)	---	---
15:40-18:30	Tutorials (parallel sessions)	Debapriyay Mukhopadhyay Manjesh Kumar Hanawal Vishwas Patil	Overview of Applications of Machine Learning in Encrypted Traffic Analysis for Cyber Security Vajra: A Tool for Endpoint Management and Threat Detection Data Anonymization Techniques

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**Day 2**  
Dec-17  
(Sunday)

Time	Session	Presenter	Title
09:30-10:30	<b>Keynote 2</b>	<b>Sanjam Garg</b> UC Berkeley	<b>hinTS: Threshold Signatures with Silent Setup</b>
10:30-11:00	(TEA BREAK)	---	---
11:00-12:30	Session B1 (Blockchains) Session Chair: TBA	Paper-ID-85f Paper-ID-20f Paper-ID-91f	Ensuring Data Security in the Context of IoT Forensics Evidence Preservation with Blockchain and Self-Sovereign Identities Analysis of Optimal Number of Shards using ShardEval, A Simulator for Sharded Blockchains SoK: Digital Signatures and Taproot Transactions in Bitcoin
12:30-14:00	(LUNCH BREAK)	---	---
14:00-15:00	Session B2 (Blockchains) Session Chair: TBA	Paper-ID-76s Paper-ID-13s Paper-ID-80s	Crypto-Ransomware Detection: A Honey-file based approach using chi-square test PSDP: Blockchain-Based Computationally Efficient Provably Secure Data Possession Private and Verifiable Inter-bank Transactions and Settlements on Blockchain
15:00-16:00	PhD Forum	PhD Forum authors	Lightening-talks (5 mins)
16:00-17:00	Posters + Demo + Tea	PhD Forum + Demo authors	Industry/Demo
17:00-17:40	Session P (Privacy) Session chair: TBA	Paper-ID-23s Paper-ID-37s	Attack on the Privacy-Preserving Carpooling Service TAROT Democracy in Your Hands!: Practical Multi-Key Homomorphic E-Voting
17:40-18:00	Business Meeting	All are welcome	ICISS 2024 proposals

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**Day 3**  
Dec-18  
(Monday)

Time	Session	Presenter	Title
09:30-10:30	Session N (Network Security) Session chair: TBA	Paper-ID-68f Paper-ID-64f	Detection and Hardening Strategies to Secure an Enterprise Network Attack Graph Based Security Metrics For Dynamic Networks
10:30-11:00	(TEA BREAK)	---	---
11:00-12:30	Session C (Crypto) Session chair: TBA	Paper-ID-81s Paper-ID-56f Paper-ID-107s Paper-ID-32s	An Energy-conscious surveillance scheme for intrusion detection in underwater sensor networks using Tunicate swarm optimization Secured Collaboration with Ciphertext Policy Attribute Based Signcryption in a Distributed Fog Environment for Medical Data Sharing Verifiable Timed Accountable Subgroup Multi-signatures Escrow and Pairing Free CP-ABE Scheme with Forward and Backward Secrecy for Healthcare Internet of Things
12:30-14:00	(LUNCH BREAK)	---	---
14:00-15:00	<b>Invited Talk 1</b>	<b>Thomas Silkjær</b> <b>XRP Ledger Foundation</b>	<b>Follow the Money</b>
15:00-15:30	Session B3 (Blockchains)	Paper-ID-96f	BCTPV-NIZK: Publicly-verifiable non-interactive zero-knowledge proof system from minimal blockchain assumptions
15:30-16:00	(TEA BREAK)	---	---
16:00-17:30	Session B3 (Blockchains) Session chair: TBA	Paper-ID-67f Paper-ID-24f Paper-ID-74f	Proof-of-Variable-Authority: A blockchain consensus mechanism for securing IoT networks An Efficient Two-Party ECDSA Scheme for Cryptocurrencies Secure Smart Grid Data Aggregation Based on Fog Computing and Blockchain Technology

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**Day 4**  
Dec-19  
(Tuesday)

Time	Session	Presenter	Title
09:30-10:30	Session L1 (AI/ML) Session chair: TBA	Paper-ID-86f Paper-ID-92f	STN-Net: A Robust GAN-Generated Face Detector MDLDroid: Multimodal Deep Learning based Android Malware Detection
10:30-11:00	(TEA BREAK)	---	---
11:00-12:30	Session L2 (AI/ML) Session chair: TBA	Paper-ID-90f Paper-ID-78f Paper-ID-33s	A Cycle-GAN Based Image Encoding Scheme for Privacy Enhanced Deep Neural Networks Secure KNN Computation On Cloud A Multi-Stage Multi-Modal Classification Model for DeepFakes Combining Deep Learned and Computer Vision Oriented Features
12:30-14:00	(LUNCH BREAK)	---	---
14:00-15:00	<b>Invited Talk 2</b>	<b>Mauro Conti</b> <b>University of Padua/TU Delft</b>	<b>Covert &amp; Side Stories: Threats Evolution in Traditional and Modern Technologies</b>
15:00-15:30	Closing address & Feedback	Local Organizing Committee	
15:30-16:00	(HIGH TEA)	---	---

**NIT Raipur, December 16 - 20, 2023**  
Conference Website: <https://iciss.isrdc.in>