CT: Contributed Talks, KL: Keynote Lecture

Wednesday, November 20, 2024

9:00–9:30	Registration

10:00–10:45	Inaguration and Welcome Remarks

		Keynote Lecture I, Session Chair: Dr. Kamalesh Acharya	
11:00–11:55	KL	**Dr. Debasish Roy** IPS, DG & IGP Railways, West Bengal, India	Quantum Computing on Boolean Functions
		Keynote Lecture II, Session Chair: Dr. Mriganka Mandal	
12:05–13:00	KL	**Dr. Jintai Ding** Professor of Mathematics, Tsinghua University, Beijing, China	Post-quantum Cryptography, A New Era

13:00–14:30	Lunch

14:30–15:30	Workshop on Quantum Cryptanalysis I

		Paper and Abstract Presenation I, Session Chair: Dr. Sourav Das	
15:35–15:50	CT	*Debasish Roy* Suman Dutta, Aarav Jaiswal, Subhamoy Maitra	On (Noisy) Simon's (Quantum) Algorithm for Multi-shift Boolean Functions

		Keynote Lecture III, Session Chair: Dr. Sreenivasa Rao Y	
16:00-16:55	KL	**Dr. Anupam Chattopadhyay** Associate Professor, School of Computer Science and Engineering, NTU Singapore	Security and Privay of Machine Learning

17:00-17:15	Tea Break

17:15–18:00	Workshop on Quantum Cryptanalysis II

19:00–21:00	Grand Dinner

Thursday, November 21, 2024

		Paper and Abstract Presentation II, Track I	
		Session Chair: Dr. Sourav Das	
08:15–08:30	CT	*Swayam Sopnic Nayak* Dumesh Meher	Illuminating the Dark Web: Enhancing Investigations with OSINT Techniques
08:30–08:45	CT	*Hitarth Rana* Jay Mehta	Generalized multi-moduli RSA: a new approach towards increasing the security of multi-prime RSA
08:45–09:00	CT	*Tapaswini Mohanty* Vikas Srivastava, Y. Sreenivasa Rao	An Efficient and Secure Quantum Group Signature with Applications to Vehicular Ad Hoc Networks
		Paper and Abstract Presentation II, Track II	
		Session Chair: Dr. Kunal Dey	
08:00–08:15	CT	*Gatram Sravan Kumar* Kamalakanta Sethi, Piyush Joshi, Padmalochan Bera	Advanced Image Steganography: Leveraging SLIC and QWT for Robust Data Hiding
08:15–08:30	CT	*Zeenath A U* Lakshmy KV, Chungath Srinivasan	Construction of Boolean functions with 2k-valued Walsh Spectrum and High Nonlinearity
08:30–08:45	CT	*Debapriyay Mukhopadhyay*	Efficient Implementation of Modular Multiplicative Inverse w.r.t 2^i
		Paper and Abstract Presentation II, Track III	
		Session Chair: Dr. Vikas Srivastava	
08:00–08:15	CT	*Manish Kumar Pandit* Sangram Ray, Priyanka Das	MAP-ECC: Mutual Authentication Protocol for e-Agriculture using ECC
08:15–08:30	CT	*Soumen Bajpayee* Sarbani Sen, Prithwish Dey, Imon Mukherjee	A Quantum Public Key Cryptographic Scheme using Entangled States and Grover Operator
08:30–08:45	CT	*Anupama Mishra* Vivek Katiyar	A Machine Learning-Based Surveillance Model

		Keynote Lecture IV, Session Chair: Dr. Sumit Kumar Debnath	
09:15–10:15	KL	**Dr. Saibal Kumar Pal** Senior Scientist, SAG Lab, Defense Research & Development Organization, Delhi, India	Long-Term Cryptographic Security

10:15–10:30	Tea Break

		Keynote Lecture V, Session Chair: Dr. Sreenivasa Rao Y	
10:30-11:30	KL	**Dr. Subhamoy Maitra** Professor (HAG) and Head, Applied Statistics Unit,Indian Statistical Institute, Kolkata, India	A Cryptographic View to Quantum Paradigm

		Paper and Abstract Presentation II	
		Session Chair: Dr. Subhamoy Maitra	
11:35–11:50	CT	*Ramprasad Sarkar* Utkarsh Sahai, Mriganka Mandal	On the Security of AMRIBE, Anonymous Multi-receiver Identity-based Encryption

		Keynote Lecture VI, Session Chair: Dr. Sourav Das	
12:00–12:55	KL	**Dr. Ratna Dutta** Associate Professor, Department of Mathematics, Indian Institute of Technology Kharagpur, India	Post Quantum Secure MFHE and IPFE in Unbounded Setting for Untrusted Cloud Environment - Instantiation and Implementation

13:00–14:30	Lunch

		Paper and Abstract Presentation III, Track I	
		Session Chair: Dr. Vikas Srivastava	
14:30–14:45	CT	*Nilin Prabhaker* Rahul Maurya, Ghanshyam S Bopche, Michael Arock	Generation of Believable Fake Integral Equations for Cyber Deception
14:45–15:00	CT	*Kuldeep Namdeo* Dheerendra Mishra, Namita Srivastava	Algebraic Cryptanalysis and countermeasures of Lightweight Signature Scheme based on Multivariate Quadratic Polynomials
15:00–15:15	CT	*Narendra Kumar Ch* Dinesh Kumar	A Secure and Decentralized EHR System Using Blockchain and IPFS

15:15–15:30	CT	*Sonam Mandal* Rakesh Kumar Sinha	EEG changes detection in Traumatic Brain Injury with Artificial Intelligence
		Paper and Abstract Presentation III, Track II	
		Session Chair: Dr. Tanmay Choudhury	
14:30–14:45	CT	*Yenugupalli Prasanna Kumar* Valli Kumari Vatsavayi	SQL Injection Detection
14:45–15:00	CT	*Akanksha Singh* Saurabh Rana, Harish Chandra	SIS-Based Signature Schemes and Their Countermeasures: From Vulnerability to Vigilance
15:00–15:15	CT	*Teodor C Curcudel*	A Security and Privacy Model For Automotive
15:15–15:30	CT	*Scutaru Iulian-Tudor* Other Author Names	Quantum-Resistant Attribute-Based Encryption based on McEliece

		Keynote Lecture VII, Session Chair: Dr. Subha Sarkar	
15:45–16:45	KL	**Dr. Sourav Mukhopadhyay** Professor, Department of Mathematics, Indian Institute of Technology Kharagpur, India	How Secure is Your Data? Exploring the Power of Public Key Encryption, Functional Encryption, and Fully Homomorphic Encryption

17:00–17:30	**Valedictory and Vote of Thanks**