Springer 6th Edition - International Conference on Computing Science, Communication and Security (COMS2-2025)
September 12th – 13th 2025
Ganpat University, Gujarat, India

List of Accepted Research Papers - Oral Presentation and Publications (Hybrid Mode)

Participation Modes:

- **International Authors (outside India): Hybrid participation requests will be considered.**
- **Authors from States other than Gujarat (India): Online participation may be permitted under exceptional circumstances.**
- **Authors from Gujarat (India): Physical presence of the presenting author is mandatory.**

Paper Acceptance Ratio:

- **COMS2-2025 has a competitive 20% paper acceptance ratio, with 48 out of 238 submissions selected after a rigorous double-blind peer-review process and evaluated by the Springer CCIS Board for presentation.**
- **Only accepted and presented papers will be published in the Scopus Indexed Springer CCIS Proceedings - COMS2-2025 series available https://link.springer.com/conference/coms2**

Sr. No	Paper ID	Research Paper Title	Author
1	542	A Reinforcement Learning-Based Energy-Aware Hybrid Routing Protocol (RL-EAHR) for Enhancing Network Lifetime, Scalability, and Resilience in Mobile Ad Hoc Networks (MANETs)	Serin F, Serin F
2	543	Modified BB84 Protocol with Grouped Photons for PNS Attack Resistance and Long-Distance Quantum Key Distribution.	AARTI TAYDE, AARTI TAYDE, Sunil Patil, Snehal Sharma, Arjun Mane , Yogesh Sonawane
3	545	A GENERATIVE METHOD FOR STEGANOGRAPHY BY COVER SYNTHESIS WITH SECURE SYSTEM	RAGHI K R, RAGHI K R, Arjun Paramarthalingam, Anto Melvin Mathew

4	546	Secure and Dynamic Routing in Mobile Ad-Hoc Networks through Advanced Cryptographic Mechanisms	Viji Gripsy.J, Viji Gripsy.J
5	563	Optimizing IoT Networks: Insights from Comparative Analysis in Terrestrial and Underwater Acoustic Environments	Ankur Sisodia, Ankur Sisodia, Swati Vishnoi
6	578	Explainable AI for Detecting & Analysing AI-Generated Face image	Nishi Bhuta, Nishi Bhuta, Prerna Mahadik, Aparna Joshi
7	582	Design and Simulation of Ultra Low Power Logarithmic Amplifier with Only First Stage Feedback for Digital Hearing Aid	Prit Hansaliya, Vidhi Gandhi, Prit Hansaliya, Urvil Vora, Mr. Jayesh Munjani , Prof. Bhavesh Soni
8	585	Real-Time Phonopulmography leveraging AI using acoustic sensing	Shreya Mishra, Shreya Mishra, Khushi Dwivedi, Shivendra Sharma, Indu Prabha Singh
9	586	Enhancing Secure and Scalable Data Exchange in Multi-Tenant Cloud Environments Using Lightweight Cryptographic Protocols	Sudheer Kumar Komuravelly, Sudheer Kumar Komuravelly
10	587	Enabling Tamper-Proof Data Auditing in Cloud Environments Using Blockchain Logging Protocols	Sudheer Kumar Komuravelly, Sudheer Kumar Komuravelly
11	606	A BLE Characteristic Analysis And Enhancement Using Attify OS For IoT Devices	Rachit Parmar, Rachit Parmar
12	608	Smart AI powered cyber security system for defending darknet intrusion detection based on deep feature cap-sule hyper scaled multi perceptron network	Nathiya Natarajan, Nathiya Natarajan
13	614	Real-time Path Deviation Detection System Using Blockchain Technology for Mission Critical Applications	Sarvesh Sawant, Sarvesh Sawant, Vivek Nair, bhawana rudra
14	635	Decentralized Identity Federation Using Blockchain for Cross-Organizational Access	Jayesh Gamar, Jayesh Gamar
15	639	Federated Anomaly Detection in IoT Networks Using Hybrid Models with Integrated Privacy Mechanisms	Rakesh V S, Rakesh V S
16	640	Smart Lab Optimization using Digital Twins and Ubiquitous Computing	Ashutosh Trivedi, Ashutosh Trivedi, Dr. Priyank Nahar

17	641	Development of an IoT Security Testbed with Integrated Attack Simulation and Explainable Threat Detection Framework	Priyang Bhatt, Priyang Bhatt, Falgun Thakkar
18	648	Blockchain Usage in Solar Sector Trading	Dhananjay Kumar, Bhawana rudra
19	649	HTTPS to FHE: Rethinking Web Security for Real-Time Privacy-Preserving Applications	Mahesh Pokharkar,
20	650	Game-Theoretic and Formal Approaches to Securing Non-Human Accounts in Identity and Access Management	Kapil Chakravarthy Sanubala, Kapil Chakravarthy Sanubala, Uday Chatur, Vishalkumar Langaliya, Bhushan Bhimrao Chavan
21	651	Hybrid Post-Quantum Image Steganography Using Cryptographic Techniques	Ashish Modi, Ashish Modi, bhawana rudra
22	653	Enhancing Privacy and Security in Blockchain-Driven NFT Marketplaces Using Zero Knowledge Proof	Nikhil Tom Jose, M. Venkat Prashanth, V. Kanapathi, Nikhil Tom Jose, Meena Belwal, Sai Srujan Reddy Pothamsetti
23	655	Fusion of Graph-Based Transformations and Multi-Modal Structures for Visual Reasoning	Swaraj Jagdale, Swaraj Jagdale, bhawana rudra
24	657	Hybrid PSO-JAYA Algorithm for Solving the Multi-Objective Electric Vehicle Routing Problem (EVRP)	Tejaswini Patil, Tejaswini Patil, Sandip Mane
25	662	DeepXDetect: Real-Time Sandbox Malware Detection with Explainable AI	Shaik Begum, Shaik Begum, Suresh Babu G
26	663	Design and Verification of a Modified Numerically Controlled Oscillator for Clock Recovery in a Digital SerDes Receiver Implemented on an FPGA	Harsh Shah, Harsh Shah
27	664	Optimized Multi-Process Computing for Efficient Multimodal Biometric Security System	Asha Digge, Asha Digge, Dr. SUNIL MOON, Rupesh Jaiswal
28	665	Optimizing Emergency Dispatch in Smart Cities: A Reinforcement Learning-Based QR Code Response System	Ankamreddi Easwara Sri Sai Venkat, Ankamreddi Easwara Sri Sai Venkat, Tejaswini Alapati , Jahnavi Sattu, Kavitha Modepalli
29	675	Siamese Contrastive Learning Network and Pix2pix GAN for image-based steganalysis using Linear Predictive Coding	Celia Anthony, Dr. Savan Patel

30	677	Comprehensive Place-and-Route and Signoff Methodology for Automotive SoC at Legacy Node	Yashvi Tada, Yashvi Tada, Riya Soni, Bhavesh Soni
31	685	An Exhaustive Analysis of Machine Learning and Deep Learning for Credit Card Fraud Detection: Methodologies, Performance, and Challenges	DHWANIR SHAH, DHWANIR SHAH, Lokesh Sharma
32	687	Reducing Water Wastage in Agriculture: A Smart Irrigation Approach Using Arduino and IoT	Suraj Singh Mehta, Heer Patel, Dr. Khushboo Shah
33	691	A Chaos-Based Technique with Reversible Data Hiding for Enhanced Security of Medical Data	R Anushiadevi, S Yaswanth , R Anushiadevi, R Sivaraman
34	692	Development and UVM-Based Functional Verification of a Scalable & Configurable UART VIP	Kinjal Patel, Kinjal Patel, Bablu Ranjan Suryarashmi Mallick, Rahul Gandhi, Bhavesh Soni
35	695	Behavioral Biometrics: A Comparison of Keystroke Dynamics and Mouse Trajectories for Bot Detection	Prof. Jatayu Baxi ,Disha Modi, Brijesh Bhatt, Bhavika Gambhava
36	698	Securing Collaboration: Federated Learning with Homomorphic Encryption	Meena Veeraiyan, Meena Veeraiyan, Kanishkka K, Kavipriya A, Senthil Kumar J
37	718	Deep Learning-Enhanced Boosting-Based Ensemble Model for Phishing Detection	R Anushiadevi, R Anushiadevi, Dr. Venkatesh, v, B Ramneshkar, K Preetha, G M Roshini
38	721	Design, Implementation and Verification of UART with APB Slave Interface using Verilog	Govindchandra Patel, Govindchandra Patel, Atul Baghel, Rahul Gandhi, Bhavesh Soni
39	724	IoT-Based Automated Irrigation System and Crop Recommendation in Agriculture Using Machine Learning	Boopathy C P, Boopathy C P
40	725	Optimizing GIF Steganography with Deep Learning for Superior Image Concealment	Sudhakaran G, Sudhakaran G, Melvin R, Om Kumar C U, Renjith P N, Logeswari G
41	728	HIGH PERFORMANCE RSP-14TSRAM CELL DESIGN USING 65nm CMOS TECHNOLOGY FOR LOW POWER AERIAL APPLICATIONS	Vempuluru kusuma, Vempuluru kusuma, Pallavi CH
42	738	Secure Post-Quantum Authentication for Wearable Healthcare Devices.	Neetu Sharma, Neetu Sharma, Geetesh Kumar Mishra

43	740	Dynamic GCN-TCN-CapsNet: A Lightweight Hybrid Model for Real-Time Gait Recognition	R Anushiadevi, Dr. Venkatesh, v, R Anushiadevi, B Ramneshkar, Ayush Ravi Tiwary, B Rani Swaroop
44	742	Adaptive Threshold-Controlled Static Contention Free Differential Flip-Flop (ATC-SCDFF)	Chalamcherla Monica
45	746	AI-Driven Precision Farming: Leveraging Environmental and Soil Parameters for Accurate Crop Yield Prediction	Juhi Patel, Juhi Patel
46	748	An adaptive promiscuous mode-oriented watchdog mechanism with a route rater for secure and reliable route identification in VANETs	Raghu Ramamoorthy, Saravana Kumar E, Anitha Velu , Smitha J A
47	751	Optimizing Base Station Placement to Minimize Interference for Satellite Terrestrial Networks (STN)	Bhargavi Goswami
48	752	Quantum-Resistant Image Encryption Using Adaptive Signal Transform and Generative Learning	Sudheer Singh

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