Table of Contents

Security and Privacy in Networked Systems

Collaborative Approach for Data Integrity Verification in Cloud Computing	1
EESOR: Energy Efficient Selective Opportunistic Routing in Wireless Sensor Networks	16
C.R. Yamuna Devi, B. Shivaraj, S.H. Manjula, K.R. Venugopal, and Lalit M. Patnaik	
A Security Framework for Multi-authority Based e-Sealed Bid Auction System	32
Analysis of Semantic Attacks in Online Social Networks	45
Enhanced Security of PHR System in Cloud Using Prioritized Level Based Encryption	57
MM-SOAR: Modified SOAR Protocol Using Multiple Metrics for Wireless Mesh Network	70
Clustering Based Routing Strategies for Energy Management in Ad-Hoc Networks	79
Virtual Machine Isolation: A Survey on the Security of Virtual Machines	91
Trust Based VM Consolidation in Cloud Data Centers	105
A Trust Model for Directory-Based Service Discovery in Mobile Ad Hoc Networks	11

Chain Routing for Convergecast Small Scale Wireless Sensor	
Networks	127
A Genetic Algorithm for Scheduling Workflow Applications in Unreliable Cloud Environment	139
Autonomic SLA Management in Cloud Computing Services	151
Multimedia Security	
A Novel Audio Watermark Embedding and Extraction Method Based on Compressive Sensing, Sinusoidal Coding, Reduced SVD, over Complete Dictionary and L1 Optimization	160
Compressive Sensing Based Audio Scrambling Using Arnold Transform	172
Cryptanalysis of Two Authentication Scheme for DRM System	184
Improving Test Conformance of Smart Cards versus EMV-Specification by Using on the Fly Temporal Property Verification	192
Palm Print Recognition Using Fusion of 2D-Gabor and 2D Log-Gabor Features	202
Cryptosystems, Algorithms, Primitives	
A New Variant of Algebraic Attack	211
A Novel Design of Chaos Based S-Box Using Difference Distribution Table (CD S-Box)	223
On the Extensions of (k, n)*-Visual Cryptographic Schemes	231
A Graph Data Model for Attack Graph Generation and Analysis Mridul Sankar Barik and Chandan Mazumdar	239

Table of Contents	XVII
Computationally Perfect Secret Sharing Scheme Based on Error-Correcting Codes	251
Warfare Message Communication in Tactical WMN Using HWMP $Jayalakshmi~G.~Naragund~and~R.M.~Banakar$	263
Metadata Attribute Based Cipher-Key Generation System in Cloud Ramalingam Anitha and Saswati Mukherjee	275
Cryptanalysis of Yang et al.'s Digital Rights Management Authentication Scheme Based on Smart Card Dheerendra Mishra and Sourav Mukhopadhyay	288
System and Network Security	
Automatic Evaluation and Signature Generation Technique for Thwarting Zero-Day Attacks	298
A Theoretical Study on Access Control Model in Federated Systems Anant V. Nimkar and Soumya K. Ghosh	310
CASSHH – Case Adaptive SSH Honeypot	322
Improved Detection of P2P Botnets through Network Behavior Analysis	334
SLASS: Secure Login against Shoulder Surfing	346
Differential Execution Analysis for Obfuscation Reduction $\dots R.$ Reno Robert	358
Short Papers	
Emergency Aware, Non-invasive, Personalized Access Control Framework for IMDs	370
Index Page Based EDoS Attacks in Infrastructure Cloud	382
Privacy Preserving Ranked Keyword Search over Encrypted Cloud Data	396

Combining the X.509 and the SAML Federated Identity Management Systems	404
Marcus Hardt, Arsen Hayrapetyan, Paul Millar, and Shiraz Memon	
Analysis of Electronic Voting Protocol Using Strand Space Model Venkatasamy Sureshkumar and Ramalingam Anitha	416
Seamless Handoff of Ping-Pong Calls in Mobile Wimax Networks Balu Sridevi, G.V. Shirley Julia, and S. Rajaram	428
Static Malware Analysis Using Machine Learning Methods	440
Making an Application Provenance-Aware through UML – A General Scheme	451
Enhancing E-Payment Security through Biometric Based Personal Authentication Using Steganography Scheme – B-PASS	461
Second International Workshop on Security in Self-Organising Networks (SelfNet 2014)	
A Novel Cloud Based NIDPS for Smartphones	473
Preserving Database Privacy in Cloud Computing	485
A Survey on Wi-Fi Protocols: WPA and WPA2	496
Workshop on Multidisciplinary Perspectives in Cryptology and Information Security (CIS 2014)	
On the k-error Joint Linear Complexity and Error Multisequence over $F_q(\text{char } F_q = p, \text{ prime})$	512
Implementation of an Elliptic Curve Based Message Authentication Code for Constrained Environments	520
A Hybrid Encryption Technique for Securing Biometric Image Data Based on Feistel Network and RGB Pixel Displacement	530

Table of Contents	XIX
A Simple and Efficient Key-Dependent S-Box Design Using Fisher-Yates Shuffle Technique	540
Second International Workshop on Trust and Privacy in Cyberspace (CyberTrust 2014)	
Experimental Analysis on Access Control Using Trust Parameter for Social Network	551
Author Index	563