Table of Contents

Applications

System-Level Permission Management Mechanism of Android Device Dali Zhu, Zheming Fan, and Na Pang	1
Enhancing Security of the Android Platform via Multi-level Security Model	13
A Competitive Three-Level Pruning Technique for Information Security	25
Popularity Prediction of Tianya BBS Posts Based on User Behavior Ge Li, Yue Hu, and Yanyu Yu	33
Design and Implementation of Network User Behaviors Analysis Based on Hadoop for Big Data	44
The Research of Extraction Algorithm for Target Feature of Chest Bitmap	56
A Method for Detecting Trojan Based on Hidden Network Traffic Analysis	65
A Survey on Encrypted Traffic Classification	73
Curbing Cyber Crimes	
An Approach to Detect the Internet Water Army via Dirichlet Process Mixture Model Based GSP Algorithm	82
Modeling and Analysis of Network Survivability under Attack Propagation	96
Su Yao, Jianfeng Guan, Shuwei Ding, Hongke Zhang, and Fei Song	55

A Scalable Approach for Vulnerability Discovery Based on Security	
Patches	109
Modeling the Effect of Infection Time on Active Worm Propagations Hui Liu, Xiaolong Ma, Tianzuo Wang, Bo Ding, and Qiang Lu	123
Data Privacy	
Location Privacy Preserving for Semantic-Aware Applications Lefeng Zhang, Ping Xiong, and Tianqing Zhu	135
Analysis on the Reliability of Non-repairable and Repairable Network Storage Systems	147
Homomorphic Cryptography-Based Privacy-Preserving Network Communications	159
The 0-1 Knapsack Polytope – A Starting Point for Cryptanalysis of Knapsack Ciphers?	171
Digital Forensics	
Forensic Identification of Students Outsourcing Assignment Projects from Freelancer.com	183
A Novel Method for Detecting Double Compressed Facebook JPEG Images	191
Allan NG, Lei Pan, and Yang Xiang	101
Using Randomization to Attack Similarity Digests Jonathan Oliver, Scott Forman, and Chun Cheng	199
Research of Password Recovery Method for RAR Based on Parallel Random Search	211
Security Implementations	
Sybil-Resist: A New Protocol for Sybil Attack Defense in Social Network	219

Table of Contents	ΧI
PAITS: Detecting Masquerader via Short-Lived Interventional Mouse Dynamics	231
Social Engineering through Social Media: An Investigation on Enterprise Security	243
Efficient Key Pre-distribution for 6LoWPAN	256
Author Index	265