

NSS 2013 All-in-One Program (41 Full Papers*25mins + 30 Short Papers* 20mins)

| 2013-06-03 (Day 1) | 1 keynote + 25 Full Papers +2 Short | Papers: "Fundacion Gomez-Pardo B | uilding" (1 calle Alenza) |
|--------------------|--|---|--|
| 8:00:-8:40 | Registration and Conference Kit Collection | | |
| 8:40-9:00 | Opening (Ravi Sandhu and Javier Ortega-Garcia): Conference Room | | |
| 9:00-10:00 | Keynote: Biometrics: The Future Beckons by Prof. Arun Ross (Chair: Ravi Sandhu): Conference Room | | |
| 10:00-10:30 | Coffee Break: Main Entrance Hall of the School of Mines building (21 calle Rios Rosas) | | |
| | Conference Room (4F | +1S) | ROOM 2 (4F+1S) |
| 10:30-12:30 | S1: Malware and Intrus | sions S7: | Security Protocols and Practice |
| 12:30-13:45 | Lunch @ Main Entrance Hall of the School of Mines building (21 calle Rios Rosas) | | |
| | Conference Room (| 8F) | ROOM2 (9F) |
| 13:50-15:30 | S2: Applications Sec | urity | S8: Applications Security |
| 15:30-16:00 | Coffee Break: Main Entrance Hall of the School of Mines building (21 calle Rios Rosas) | | |
| 16:00-18:05 | S3: Security Algorithms and | l Systems | S9: Modeling and Evaluation |
| 20:30 | Banquet Dinner: VP Jardin Metropolita | no Hotel (12 Avenida Reina Victoria) | |
| 2013-06-04 (Day 2) | 1 keynote + 16 Full Papers + 28 Sho | rt Papers: "Fundacion Gomez-Pardo | Building" (1 calle Alenza) |
| 8:00-9:00 | Registration and Conference Kit Colle | ction | |
| 9:00-10:00 | Keynote: Authentication, Privacy and C | Ownership Transfer in Mobile RFID Sys | stems by Prof. Wanlei Zhou (Chair: Jiankun |
| | Hu): Conference Room | | |
| 10:00-10:30 | Coffee Break: Main Entrance Hall of the | ne School of Mines building (21 calle R | lios Rosas) |
| | Conference Room (4F+1S) | ROOM 2 (4F+1S) | |
| 10:30-12:30 | S4: Cryptographic Algorithms I | S10: Privacy | |
| 12:30-13:45 | Lunch @ Main Entrance Hall of the So | hool of Mines building (21 calle Rios F | Rosas) |
| | Conference Room (4F + 7S) | ROOM 2 (4F+7S) | ROOM1 (12 S) |
| 13:50-15:30 | S5: Cryptographic Algorithms II | S11: Key Agreement and Distribution | on S13: Industrial Track I |
| 15:30-16:00 | Coffee Break @ Main Entrance Hall o | the School of Mines building (21 calle | e Rios Rosas) |
| 16:00-18:20 | S6: Shot Papers I | S12: Shot Papers II | S14: Industrial Track II |

| NSS 2013 | Program @ Conference Room, Fundacion Gomez-Pardo Building (1 calle Alenza) | |
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| 2013-06-03 (Day 1) | | |
| S1: Malware and Intrusi | ons (Chair: José M. Fernandez) | |
| 10:30-10:55 | MADS: Malicious Android Applications Detection through String Analysis Borja Sanz, Igor Santos, Javier Nieves, Carlos Laorden, Iñigo Alonso-González and Pablo García Bringas | |
| 10:55-11:20 | X-TIER: Kernel Module Injection Sebastian Vogl, Fatih Kilic, Christian Schneider and Claudia Eckert | |
| 11:20-11:45 | Leveraging String Kernels for Malware Detection Jonas Pfoh, Christian Schneider and Claudia Eckert | |
| 11:45-12:10 | Insiders Trapped in the Mirror Reveal Themselves in Social Media Miltiadis Kandias, Konstantina Galbogini, Lilian Mitrou and Dimitris Gritzalis | |
| 12:10-12:30 | Combing Dynamic Passive Analysis and Active Fingerprinting for Effective Bot Malware Detection in Virtualized Environments (short paper) Shun-Wen Hsiao, Yi-Ning Chen, Yeali Sun and Meng Chang Chen | |
| Lunch 12:30-13:45: Mair | n Entrance Hall of the School of Mines building (21 calle Rios Rosas) | |
| S2: Applications Securi | ty (Chair: Wanlei Zhou) | |
| 13:50-14:15 | On Business Logic Vulnerabilities Hunting: The APP_LogGIC Framework George Stergiopoulos, Bill Tsoumas and Dimitris Gritzalis | |
| 14:15-14:40 | Using the Smart Card Web Server in Secure Branchless Banking Sheila Cobourne, Keith Mayes and Konstantinos Markantonakis | |
| 14:40-15:05 | Liability for data breaches: a proposal for a revenue-based sanctioning approach Maurizio Naldi, Marta Flamini and Giuseppe D'Acquisto | |
| 15:05-15:30 | Efficient and Private Three-Party Publish/Subscribe Giovanni Di Crescenzo, Jim Burns, Brian Coan, John Schultz, Jonathan Stanton, Simon Tsang and Rebecca N. Wright | |
| Coffee Break: 15:30-16: | 00: Main Entrance Hall of the School of Mines building (21 calle Rios Rosas) | |
| S3: Security Algorithms | and Systems (Chair: Qiang Tang) | |
| 16:00-16:25 | Marlin: A fine grained randomization approach to defend against ROP attacks Aditi Gupta, Sam Kerr, Michael Kirkpatrick and Elisa Bertino | |

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| 16:25-16:50 | | Mobile Trusted Agent (MTA): Build user-based trust for general-purpose computer platform | |
| 10.20-10.00 | Wei Feng, Yu Qin, Dengguo Feng, Ge Wei, Lihui Xue and Dexian Chang | | |
| 16:50-17:15 | Anomaly Detection for Ephemeral Cloud IaaS Virtual Machines | | |
| | Suaad Alarifi and Stephen Wolthusen | | |
| | 47.45 47.40 | JShadObf: A JavaScript Obfuscator based on Multi-objective Optimization Algorithms | |
| | 17:15-17:40 | Benoit Bertholon, Sebastien Varrette and Pascal Bouvry | |
| 20:30 | Banquet Dinner: V | : VP Jardin Metropolitano Hotel (12 Avenida Reina Victoria) | |
| 2013-0 | 6-04 (Day 2) | | |
| S4: Cr | yptographic Algorith | ms I (Jiankun Hu) | |
| | 10:30-10:55 | Forward Secure Certificateless Proxy Signature Scheme | |
| | 10.30-10.55 | Jiguo Li, Yanqiong Li and Yichen Zhang | |
| | 10:55-11:20 | Leakage-Resilient Zero-Knowledge Proofs of Knowledge for NP | |
| | 10.55-11.20 | Hongda Li, Qihua Niu and Bei Liang | |
| | 11:20-11:45 | On the Security of an Efficient Attribute-Based Signature | |
| | 11.20-11.45 | Yan Zhang, Dengguo Feng and Zhenfeng Zhang | |
| | 11:45-12:10 | Factoring RSA Modulus with Known Bits from Both p and q: A Lattice Method | |
| | 11.45-12.10 | Yao Lu, Rui Zhang and Dongdai Lin | |
| | 12:10-12:30 | Enhancing Passive Side-Channel Attack Resilience through Schedulability Analysis of Data-dependency Graphs | |
| | 12.10-12.30 | Giovanni Agosta, Alessandro Barenghi, Gerardo Pelosi and Michele Scandale | |
| Lunch | : 12:30-13:45 : Main E | ntrance Hall of the School of Mines building (21 calle Rios Rosas) | |
| S5: Cr | yptographic Algorith | ms II (Qiang Tang) | |
| | 10.50 11.15 | Performance Prediction Model for Block Ciphers on GPU Architectures | |
| | 13:50-14:15 | Naoki Nishikawa, Keisuke Iwai, Hidema Tanaka and Takakazu Kurokawa | |
| | 11.15 11.10 | Threshold-Oriented Optimistic Fair Exchange | |
| 14:15-14:40 | 14.10-14.40 | Yang Wang, Man Ho Au, Joseph Liu, Tsz Hon Yuen and Willy Susilo | |
| 44.40.45.05 | 14:40-15:05 | Secure Storage and Fuzzy Query over Encrypted Databases | |
| | 14.40-15.05 | Zheli Liu, Haoyu Ma, Jin Li, Chunfu Jia, Jingwei Li and Ke Yuan | |
| | 15:05 15:20 | A Highly Efficient RFID Distance Bounding Protocol Without Real-time PRF Evaluation | |
| | 15:05-15:30 | Yunhui Zhuang, Anjia Yang, Duncan S. Wong, Guomin Yang and Qi Xie | |
| Coffee | Break: 15:30-16:00: | Main Entrance Hall of the School of Mines building (21 calle Rios Rosas) | |
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| S6: Shot Papers I (Chair | 6: Shot Papers I (Chair: Brian Coan) | |
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| 16:00-16:20 | Building Better Unsupervised Anomaly Detector with S-Transform | |
| | Sirikarn Pukkawanna | |
| 16:20-16:40 | Fault-Tolerant Topology Control Based on Artificial Immune in WMNs | |
| 10.20-10.40 | Jing Chen and Yang Xiang | |
| 16:40-17:00 | Virtually Reconfigurable Secure Wireless Networks using Broadcast Tokens | |
| 10.40-17.00 | Kannan Karthik | |
| 17:00-17:20 | On the Use of Key Assignment Schemes in Authentication Protocols | |
| 17.00-17.20 | James Alderman and Jason Crampton | |
| | On the Interactions Between Privacy-Preserving, Incentive, and Inference Mechanisms in Participatory Sensing | |
| 17:20-17:40 | Systems | |
| | Idalides Vergara, Diego Mendez-Chavez and Miguel Labrador | |
| 17:40-18:00 | Security Authentication of AODV Protocols in MANETs | |
| 17.40-16.00 | Ahmad Alomari | |
| 18:00-18:20 | Architecture for Trapping Toll Fraud Attacks Using a VoIP Honeynet Approach | |
| 10.00-10.20 | Markus Gruber, Christian Schanes, Florian Fankhauser, Martin Moutran and Thomas Grechenig | |

NSS 2013 Program @ ROOM 2, Fundacion Gomez-Pardo Building (1 calle Alenza)

| 2013-06-03 (Day 1) | |
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| S7: Security Protocols and | d Practice (Chair: Xu Huang) |
| 10:30-10:55 | A Novel Security Protocol for Resolving Addresses in the Location/ID Split architecture |
| | Mahdi Aiash |
| 10:55-11:20 | The OffPAD: Requirements and Usage |
| | Kent Are Varmedal, Henning Klevjer, Joakim Hovlandsvåg, Audun Jøsang, Johann Vincent and Laurent Miralabé |
| 11:20-11:45 | Information-oriented Trustworthiness Evaluation in Vehicular Ad-hoc Networks |
| 11.20-11.43 | Sashi Gurung, Dan Lin, Anna Squicciarini and Elisa Bertino |
| 11:45-12:10 | Using Trusted Platform Modules for Location Assurance in Cloud Networking |
| 11.45-12.10 | Christoph Krauß and Volker Fusenig |
| 12:10-12:30 | Human Identification with Electroencephalogram (EEG) for the Future Network Security (short paper) |
| 12.10-12.30 | Xu Huang, Salahiddin Altahat, Dat Tran and Shutao Li |
| Lunch 12:30-13:45: Main E | ntrance Hall of the School of Mines building (21 calle Rios Rosas) |
| S8: Applications Security | (Chair: Christoph Krauß) |
| 13:50-14:15 | Tracing sources of anonymous slow suspicious activities |
| 15.50-14.15 | Harsha Kalutarage, Siraj A. Shaikh, Qin Zhou and Anne E. James |
| 14:15-14:40 | Static Analysis for Regular Expression Denial-of-Service Attacks |
| 14.15-14.40 | Asiri Rathnayake, Hayo Thielecke and James Kirrage |
| 14:40-15:05 | Next-Generation DoS at the Higher Layers: a Study of SMTP Flooding |
| 14.40-13.03 | Gabriel Cartier, Jean-Francois Cartier and José M. Fernandez |
| 15:05-15:30 | Towards Hybrid Honeynets Via Virtual Machine Introspection and Cloning |
| 15:05-15:50 | Tamas Lengyel, Justin Neumann, Steve Maresca and Aggelos Kiayias |
| Coffee Break: 15:30-16:00: | : Main Entrance Hall of the School of Mines building (21 calle Rios Rosas) |
| S9: Modeling and Evaluati | on (Chair: Gabriel Macia-Fernandez) |
| 16:00-16:25 | Stochastic Traffic Identification for Security Management: eDonkey Protocol as a Case Study |
| 10:00-10:20 | Rafael A. Rodríguez-Gómez, Gabriel Macia-Fernandez and Pedro García-Teodoro |

| A Technology Independent Security Gateway for Real-Time Multimedia Communication | |
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| Fudong Li, Nathan Clarke and Steven Furnell | |
| Efficient Attribute Based Access Control Mechanism for Vehicular Ad Hoc Network | |
| Y.Sreenivasa Rao and Ratna Dutta | |
| Evaluation of Detecting Malicious Nodes Using Bayesian Model in Wireless Intrusion Detection | |
| Yuxin Meng, Wenjuan Li and Lam-For Kwok | |
| Model the Influence of Sybil Nodes in P2P Botnets | |
| Wang Tianzuo, Wang Huaimin, Liu Bo and Shi Peichang | |
| /P Jardin Metropolitano Hotel (12 Avenida Reina Victoria) | |
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| nong Wu) | |
| Privacy Preserving Context Aware Publish Subscribe Systems | |
| Mohamed Nabeel, Stefan Appel, Elisa Bertino and Alejandro Buchmann | |
| A New Unpredictability-Based RFID Privacy Model | |
| Anjia Yang, Yunhui Zhuang, Duncan S. Wong and Guomin Yang | |
| Privacy-Preserving Multi-Party Reconciliation using Fully Homomorphic Encryption | |
| Florian Weingarten, Georg Neugebauer, Ulrike Meyer and Susanne Wetzel | |
| Privacy-Preserving Password-based Authenticated Key Exchange in the Three-party Setting | |
| Weijia Wang, Lei Hu and Yong Li | |
| Towards a Privacy-Preserving Solution for OSNs | |
| Qiang Tang | |
| Entrance Hall of the School of Mines building (21 calle Rios Rosas) | |
| Distribution (Chair: Jia Hu) | |
| Light Weight Network Coding Based Key Distribution Scheme for MANETs | |
| Jianwei Liu, Abdur Rashid Sangi, Ruiying Du and Qianhong Wu | |
| Identity-based Dynamic Authenticated Group Key Agreement Protocol for Space Information Network | |
| Chao Wang, Kefei Mao, Jianwei Liu andf Jianhua Liu | |
| Authentication and Key Agreement based on Hyper-Sphere using Smart Cards | |
| Shaohua Tang and Lingling Xu | |
| An Efficient Constant Round ID-based Group Key Agreement Protocol for Ad hoc Networks | |
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| | Elisavet Konstantinou |
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| Coffee Break: 15:30-16:00: | Main Entrance Hall of the School of Mines building (21 calle Rios Rosas) |
| S12: Shot Papers II (Chair: | Shaohua Tang) |
| 16:00-16:20 | Collusion-Resistant Domain-Specific Pseudonymous Signatures |
| | Julien Bringer, Herve Chabanne and Alain Patey |
| 16:20 16:40 | On the Applicability of Time-Driven Cache Attacks on Mobile Devices |
| 16:20-16:40 | Raphael Spreitzer and Thomas Plos |
| 16:40-17:00 | Ancestor Excludable Hierarchical ID-based Encryption Revisited |
| 18.40-17.00 | Fan Zhang, Hua Guo and Zhoujun Li |
| 17:00 17:00 | Think Twice before You Share: Analyzing Privacy Leakage under Privacy Control in Online Social Networks |
| 17:00-17:20 | Yan Li, Yingjiu Li, Qiang Yan and Robert Deng |
| 17:00 17:40 | A Dynamic and Multi-Layer Reputation Computation Model for Multi-Hop Wireless Networks |
| 17:20-17:40 | Jia Hu, Hui Lin and Li Xu |
| 17:40-18:00 | Distributed and Anonymous Publish-Subscribe |
| | Jörg Daubert, Mathias Fischer, Stefan Schiffner and Max Mühlhäuser |
| 18:00 18:20 | Measuring and Comparing the Protection Quality in Different Operating Systems |
| 18:00-18:20 | Zhihui Han, Liang Cheng, Yang Zhang and Dengguo Feng |

| NSS | 2013 Program @ ROOM 1, Fundacion Gomez-Pardo Building (1 calle Alenza) | |
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| 2013-06-04 (Day 2) 13:5 | 0-18:20 | |
| S13: Industrial Track I (| Chair: Waleed Alsalih) | |
| 13:50-14:10 | Filtering Trolling Comments through Collective Classication Jorge De-La-Peña-Sordo, Igor Santos, Iker Pastor-López and Pablo G. Bringas | |
| 14:10-14:30 | Security Analysis of Touch Inputted Passwords - A Preliminary Study Based on the Resistance against Brute Force Attacks Nelson Uto, Emílio Tissato Nakamura and Bruno Alves Pereira Botelho | |
| 14:30-14:50 | A Pairing-free Identity Based Authentication Framework for Cloud Computing Dheerendra Mishra, Vinod Kumar and Sourav Mukhopadhyay | |
| 14:50-15:10 | Formal Modeling and Automatic Security Analysis of Two-Factor and Two-Channel Authentication Protocols Alessandro Armando, Roberto Carbone and Luca Zanetti | |
| 15:10-15:30 | Towards a More Secure Apache Hadoop HDFS Infrastructure Anatomy of a Targeted Advanced Persistent Threat against HDFS and analysis of Trusted Computing based Countermeasures Jason Cohen and Dr. Subatra Acharya | |
| Coffee Break: 15:30-16: | 00: Main Entrance Hall of the School of Mines building (21 calle Rios Rosas) | |
| S14: Industrial Track II (| Chair: Jiankun Hu) | |
| 16:00-16:20 | A Formally Verified Initial Authentication and Key Agreement Protocol in Heterogeneous Environments using Casper/FDR Mahdi Aiash | |
| 16:20-16:40 | A Comprehensive Access Control System for Scientific Applications Muhammad Ihsanulhaq Sarfraz, Peter Baker, Jia Xu and Elisa Bertino | |
| 16:40-17:00 | Partial Fingerprint Reconstruction With Improved Smooth Extension Wei Zhou, Jiankun Hu, Ian Petersen and Mohammed Bennamoun | |
| 17:00-17:20 | Modeling and Analysis for Thwarting Worm Propagation in Email Networks Sheng Wen, Yang Xiang and Wanlei Zhou | |
| 17:20-17:40 | On Secure and Power-efficient RFID-based Wireless Body Area Network Sana Ullah and Waleed Alsalih | |
| 17:40-18:00 | Towards Authenticated Objects | |

| | Daniele Midi, Ashish Kundu and Elisa Bertino |
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| 18:00-18:20 | A Finger-vein based Cancellable Bio-cryptosystem |
| | Wencheng Yang, Jiankun Hu and Song Wang |