

2013 IEEE Security and Privacy Workshops

SPW 2013

Table of Contents

Message from the General Chair	viii
DUMA 2013 Workshop Introduction	x
DUMA 2013 Program Committee	xi
WRIT 2013 Workshop Introduction	xii
WRIT 2013 Program Committee	xiii
IWCC 2013 Workshop Introduction	xiv
IWCC 2013 Program Committee	xv

DUMA 2013 Research Paper Presentations

Log Design for Accountability	1
<i>Denis Butin, Marcos Chicote, and Daniel Le Métayer</i>	
An Integrated Formal Approach to Usage Control	8
<i>P. A. Bonatti, L. Sauro, M. Faella, and C. Galdi</i>	
How Usage Control and Provenance Tracking Get Together - A Data Protection Perspective	13
<i>Christoph Bier</i>	

DUMA 2013 Position Paper Presentations

The Cloud Needs Cross-Layer Data Handling Annotations	18
<i>Martin Henze, René Hummen, and Klaus Wehrle</i>	
Privacy Preserving Data Analytics for Smart Homes	23
<i>Antorweep Chakravorty, Tomasz Wlodarczyk, and Chunming Rong</i>	
Preventive Inference Control in Data-centric Business Models	28
<i>Rafael Accorsi and Guenter Mueller</i>	
The Probabilistic Provenance Graph	34
<i>Nwokedi Idika, Mayank Varia, and Harry Phan</i>	

DUMA 2013 Position Paper

“I hereby leave my email to...”: Data Usage Control and the Digital Estate	42
<i>Stephan Micklitz, Martin Ortlieb, and Jessica Staddon</i>	

WRIT 2013: Workshop on Research for Insider Threat

Multi-Domain Information Fusion for Insider Threat Detection	45
<i>Hoda Eldardiry, Evgeniy Bart, Juan Liu, John Hanley, Bob Price, and Oliver Brdiczka</i>	
System Level User Behavior Biometrics using Fisher Features and Gaussian Mixture Models	52
<i>Yingbo Song, Malek Ben Salem, Shlomo Hershkop, and Salvatore J. Stolfo</i>	
Use of Domain Knowledge to Detect Insider Threats in Computer Activities	60
<i>William T. Young, Henry G. Goldberg, Alex Memory, James F. Sartain, and Ted E. Senator</i>	
Reporting Insider Threats via Covert Channels	68
<i>David N. Muchene, Klevis Luli, and Craig A. Shue</i>	
Differentiating User Authentication Graphs	72
<i>Alexander D. Kent and Lorie M. Liebrock</i>	
Invalidating Policies using Structural Information	76
<i>Florian Kammüller and Christian W. Probst</i>	
A Bayesian Network Model for Predicting Insider Threats	82
<i>Elise T. Axelrad, Paul J. Sticha, Oliver Brdiczka, and Jianqiang Shen</i>	
Methods and Metrics for Evaluating Analytic Insider Threat Tools	90
<i>Frank L. Greitzer and Thomas A. Ferryman</i>	
Bridging the Gap: A Pragmatic Approach to Generating Insider Threat Data	98
<i>Joshua Glasser and Brian Lindauer</i>	

IWCC 2013 Invited Paper

On Bad Randomness and Cloning of Contactless Payment and Building Smart Cards	105
<i>Nicolas T. Courtois, Daniel Hulme, Kumail Hussain, Jerzy A. Gawinecki, and Marek Grajek</i>	

IWCC 2013 Session I - Digital Forensics

Understanding Network Forensics Analysis in an Operational Environment	111
<i>Elias Raftopoulos and Xenofontas Dimitropoulos</i>	
Digital Forensic Reconstruction of a Program Action	119
<i>Ahmed F. Shosha, Lee Tobin, and Pavel Gladyshev</i>	

Craigslist Scams and Community Composition: Investigating Online Fraud Victimization	123
<i>Vaibhav Garg and Shirin Niliadeh</i>	
On Evaluating IP Traceback Schemes: A Practical Perspective	127
<i>Vahid Aghaei-Foroushani and A. Nur Zincir-Heywood</i>	

IWCC 2013 Session II - Cyber Crimes Techniques

Do Private and Portable Web Browsers Leave Incriminating Evidence? A Forensic Analysis of Residual Artifacts from Private and Portable Web Browsing Sessions	135
<i>Donny Jacob Ohana and Narasimha Shashidhar</i>	
Inside the SCAM Jungle: A Closer Look at 419 Scam Email Operations	143
<i>Jelena Isacenkova, Olivier Thonnard, Andrei Costin, Davide Balzarotti, and Aurelien Francillon</i>	
StegTorrent: A Steganographic Method for the P2P File Sharing Service	151
<i>Pawel Kopiczko, Wojciech Mazurczyk, and Krzysztof Szczypiorski</i>	
Steganography in OFDM Symbols of Fast IEEE 802.11n Networks	158
<i>Szymon Grabski and Krzysztof Szczypiorski</i>	

IWCC 2013 Session III - Cyber Crimes Prevention & Monitoring

Quantitative Assessment of Risk Reduction with Cybercrime Black Market Monitoring	165
<i>Luca Allodi, Woohyun Shim, and Fabio Massacci</i>	
Preventing Cell Phone Intrusion and Theft using Biometrics	173
<i>Donny Jacob Ohana, Liza Phillips, and Lei Chen</i>	
Author Index	181