

Tenth Annual IFIP WG 11.9 International Conference on Digital Forensics
Kontaktraum
Neues EI, 6th Floor
Gusshausstrasse 27-29
Vienna University of Technology
1040 Vienna, Austria
January 8–10, 2014

January 7, 2014 (Tuesday)

06:00pm - 09:00pm: Dinner (Danube Tower Vienna, Donauturmstrasse 4, 1220 Vienna)
Meet in Hotel Lobby @ 05:45pm

January 8, 2014 (Wednesday)

07:00am - 08:30am: Breakfast (Delta Hotel, Sonnwendgasse 8, 1100 Vienna)

08:45am - 09:00am: Welcoming Remarks and Logistics

09:00am - 10:00am: Keynote Lecture

Cryptographic Routines as an Electronic Fingerprint

Andreas Schuster, Senior Computer Forensic Examiner, Deutsche Telekom, Bonn, Germany

10:00am - 11:00am: Session 1: Forensic Investigations

Chair: Mark Pollitt, Daytona State College, Daytona, Florida, USA

Automated Analysis of Underground Marketplaces

Aleksandar Hudic, Katharina Krombholz, Thomas Otterbein, Christian Platzter and Edgar Weippl
SBA Research, Vienna, Austria

Vienna University of Technology, Vienna, Austria

Reducing Data for Forensic Investigations Using Approximate Matching

Frank Breitinger, Christian Winter, York Yannikos, Tobias Fink and Michael Seefried
Darmstadt University of Applied Sciences, Darmstadt, Germany

Fraunhofer Institute for Secure Information Technology, Darmstadt, Germany

11:00am - 11:15am: Break

11:15am - 12:15pm: Session 2: Internet Crime Investigations I

Chair: Martin Mulazzani, SBA Research, Vienna, Austria

Using Fraud Trees for Analyzing Credit Card Fraud on the Internet

Clive Blackwell

Oxford Brookes University, Oxford, United Kingdom

Conditional Weighted Transaction Aggregation for Credit Card Fraud Detection

Wee-Yong Lim, Amit Sachan and Vrizlynn Thing

Institute for Infocomm Research, Singapore

12:15pm - 01:30pm: Lunch (University Cafeteria, Wiedner Hauptstrasse 8-10, 1040 Vienna)

January 8, 2014 (Wednesday) (continued)

01:30pm - 03:00pm: Session 3: Mobile Device Forensics I

Chair: Kam-Pui Chow, University of Hong Kong, Hong Kong, China

Electronic Counter-Espionage: Back Doors and Weaknesses in iOS for Foreign Government Exploitation

Jonathan Zdziarski

Zdziarski.com, Boston, Massachusetts, USA

Smartphones as Distributed Witnesses for Digital Forensics

Heloise Pieterse and Martin Olivier

Council for Scientific and Industrial Research, Pretoria, South Africa

University of Pretoria, Pretoria, South Africa

Preserving Date and Timestamps for Incident Handling in Android Operating Systems

Robin Verma, Jayaprakash Govindaraj and Gaurav Gupta

Indraprastha Institute of Information Technology, New Delhi, India

03:00pm - 03:15pm: Break

03:15pm - 04:15pm: Session 4: Advanced Forensic Techniques I

Chair: Gaurav Gupta, Indraprastha Institute of Information Technology, New Delhi, India

Towards Fully Automated Digital Alibis with Social Interaction

Stefanie Beyer, Martin Mulazzani, Sebastian Schrittwieser, Markus Huber and Edgar Weippl

SBA Research, Vienna, Austria

University of Applied Science, St. Polten, Austria

Schema Reconstruction in Database Forensics

Oluwasola Mary Adedayo and Martin Olivier

University of Pretoria, Pretoria, South Africa

04:15pm - 05:15pm: IFIP WG 11.9 Business Meeting

06:30pm - 09:00pm: Mayor's Reception (10er Marie, Ottakringer Strasse 222-224, 1160 Vienna)

Meet in Hotel Lobby @ 06:15pm

January 9, 2014 (Thursday)

07:00am - 08:15am: Breakfast (Delta Hotel, Sonnwendgasse 8, 1100 Vienna)

08:30am - 10:00am: Session 5: Internet Crime Investigations II

Chair: York Yannikos, Fraunhofer Institute for Secure Information Technology, Darmstadt, Germany

An Exploratory Study of Profiling Online Auction Offenders

Vivien Chan, Kam-Pui Chow, Michael Kwan, Guy Fong, Michael Hui and Jemy Tang
University of Hong Kong, Hong Kong, China
Hong Kong Customs and Excise Department, Hong Kong, China

Host-Based Anomalous Behavior Detection Using Cluster-Level Markov Networks

Ahmad Mustafa, Mohiuddin Solaimani, Latifur Khan, Ken Chiang and Joe Ingram
University of Texas at Dallas, Richardson, Texas, USA
Sandia National Laboratories, Albuquerque, New Mexico

Validation Rules for Enhancing Foxy P2P Network Investigations

Ricci Jeong and Kam-Pui Chow
University of Hong Kong, Hong Kong, China

10:00am - 10:15am: Break

10:15am - 11:15am: Session 6: Advanced Forensic Techniques II

Chair: Latifur Khan, University of Texas at Dallas, Richardson, Texas, USA

A Survey of XOR as a Digital Obfuscation Technique in a Corpus of Real Data

Carolina Zarate, Simson Garfinkel, Aubin Heffernan, Scott Horras and Kyle Gorak
Poolesville High School, Poolesville, Maryland, USA
Naval Postgraduate School, Arlington, Virginia, USA
United States Military Academy, West Point, New York, USA

Similarity Hashing Based on Levenshtein Distance

Frank Breitinger, Georg Ziroff, Steffen Lange and Harald Baier
Darmstadt University of Applied Sciences, Darmstadt, Germany

11:15am - 12:15pm: Session 7: Digital Forensics Education and Research

Chair: Clive Blackwell, Oxford Brookes University, Oxford, United Kingdom

On the Availability of Data Corpora for Digital Forensic Education and Research

York Yannikos, Lukas Graner, Martin Steinebach and Christian Winter
Fraunhofer Institute for Secure Information Technology, Darmstadt, Germany

Educating the Next Generation of Cyber Forensic Professionals

Mark Pollitt and Philip Craiger
Daytona State College, Daytona, Florida, USA

12:15pm - 01:30pm: Lunch (University Cafeteria, Wiedner Hauptstrasse 8-10, 1040 Vienna)

01:30pm - 09:00pm: Sightseeing Trip and Dinner

Meet at University Entrance @ 01:30pm

January 10, 2014 (Friday)

07:00am - 08:30am: Breakfast (Delta Hotel, Sonnwendgasse 8, 1100 Vienna)

09:00am - 10:15am: Keynote Lecture

Getting the Essentials – Best Practices in Computer Forensic Investigations

Karin Mair, National Leader, Forensics Austria, Deloitte, Vienna, Austria

Lukas Reiter, National Leader, Analytics and Forensic Technology, Deloitte, Vienna, Austria

10:15am - 10:30am: Break

10:30am - 12:00pm: Session 8: Mobile Device Forensics II

Chair: Philip Craiger, Daytona State College, Daytona, Florida, USA

Forensic Investigations of TomTom Applications on Android Mobile devices

Nhien An Le Khac, Mark Roeloffs and M-Tahar Kechadi

University College Dublin, Dublin, Ireland

Forensic Investigation of Smartphones Using Lexicon-Based Mood Analysis and Text Mining Methods

Panagiotis Andriotis, Atsuhiko Takasu and Theo Tryfonas

University of Bristol, Bristol, United Kingdom

National Institute of Informatics, Tokyo, Japan

Analyzing iPhone File System Files with an Open Source Forensic Toolkit

Ahmad Raza Cheema, Mian Muhammad Waseem Iqbal and Waqas Ali Khan

National University of Sciences and Technology, Islamabad, Pakistan

12:00pm - 01:30pm: Lunch (University Cafeteria, Wiedner Hauptstrasse 8-10, 1040 Vienna)

01:30pm - 03:00pm: Session 9: Attribution Techniques and Tools

Chair: Martin Olivier, University of Pretoria, Pretoria, South Africa

Web User Profiling and Identification Based on Browsing Behavior Analysis

Xiao-Xi Fan and Kam-Pui Chow

University of Hong Kong, Hong Kong, China

Classify, but Verify: Breaking the Closed-World Assumption in Stylometric Authorship Attribution

Ariel Stolerman, Rebekah Overdorf, Sadia Afroz and Rachel Greenstadt

Drexel University, Philadelphia, Pennsylvania, USA

Active Linguistic Authentication: Real-Time Stylometric Evaluation towards Multi-Modal Decision Fusion

Ariel Stolerman, Alex Fridman, Rachel Greenstadt, Patrick Brennan and Patrick Juola

Drexel University, Philadelphia, Pennsylvania, USA

Juola and Associates, Munhall, Pennsylvania, USA

03:00pm - 03:15pm: Break

03:15pm - 04:15pm: Session 10: Digital Forensic Techniques and Tools

Chair: Sujeet Sheno, University of Tulsa, Tulsa, Oklahoma, USA

Windows Event Forensic Process

Quang Do, Ben Martini, Jia Ming Jonathan Looi, Yu Wang and Kim-Kwang Raymond Choo

University of South Australia, Adelaide, Australia

Performance of a Logical, Five-Phase, Multithreaded, Bootable Digital Forensics Triage Tool

Ibrahim Baggili, Yasser Jafar and Andrew Marrington

University of New Haven, New Haven, Connecticut, USA

Zayed University, Dubai, United Arab Emirates

06:00pm - 09:00pm: Dinner (Der Wiener Deewan, Liechtensteinstrasse 10, 1090 Vienna)

Meet in Hotel Lobby @ 05:45pm