Ninth Annual IFIP WG 11.9 International Conference on Digital Forensics Radisson Hotel Orlando – University of Central Florida

1724 Alafaya Trail Orlando, Florida 32826 January 27–30, 2013

January 27, 2013 (Sunday)

06:00pm - 08:30pm: Dinner (High Tide Harry's, 4645 S. Semoran Boulevard; Tel: (407) 273-4422) Meet in Hotel Lobby @ 05:15pm for Car Pooling

January 28, 2013 (Monday)

07:00am - 08:00am: Breakfast (Hotel Radisson University)

08:00am - 08:15am: Welcoming Remarks and Logistics

08:15am - 09:15am: Keynote Lecture

History, Historiography and the Hermeneutics of the Hard Drive Mark Pollitt, Daytona State College, Daytona, Florida, USA

09:15am - 10:15am: Session 1: Themes and Issues

Chair: Gilbert Peterson, Air Force Institute of Technology, Wright-Patterson Air Force Base, Ohio, USA

On the Scientific Maturity of Digital Forensics Research

S. Gruner and M. Olivier

University of Pretoria, Pretoria, South Africa

Scenarios for Reliable and Secure Digital Evidence

C. Rudolph, N. Kuntze, T. Kemmerich and B. Endicott-Popovsky

Fraunhofer Institute for Secure Information Technology, Darmstadt, Germany

University of Bremen, Bremen, Germany

University of Washington, Seattle, Washington, USA

10:15am - 10:30am: Break

10:30am - 11:30am: Session 2: Internet Crime Investigations I

Chair: Hein Venter, University of Pretoria, Pretoria, South Africa

Third-Party Privacy and the Investigation of Cyber Crimes

W. van Staden

University of South Africa, Pretoria, South Africa

An Empirical Study for Profiling Internet Pirates

P. Lai, K.-P. Chow, X. Fan and V. Chan

University of Hong Kong, Hong Kong, China

11:40am - 01:00pm: Lunch (Golden Corral, 11731 E. Colonial Drive; Tel: (407) 902-2979)

01:15pm - 02:15pm: Session 3: Cloud Forensics

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

Impact of Cloud Computing on Traditional Digital Forensic Investigations

A. Keane and S. O'Shaughnessy

Institute of Technology Blanchardstown, Dublin, Ireland

Rule-Based Integrity Checking of Interrupt Descriptor Tables in Cloud Environments

I. Ahmed, A. Zoranic, S. Javaid, G. Richard and V. Roussev

University of New Orleans, New Orleans, Louisiana, USA

January 28, 2013 (Monday) (continued)

02:15pm - 02:30pm: Break

02:30pm - 04:00pm: Session 4: Forensic Techniques I

Chair: Barbara Endicott-Popovsky, University of Washington, Seattle, Washington, USA

Automation of Video File Carving and Illegal Content Identification Y. Yannikos, M. Ashraf, M. Steinebach and C. Winter Fraunhofer Institute for Secure Information Technology, Darmstadt, Germany KTH Royal Institute of Technology, Kista, Sweden

Recovery of Data Stored in Proprietary-Formatted Files on a CCTV Hard Disk A. Ariffin, J. Slay and K.-K. Choo University of South Australia, Mawson Lakes, Australia

Real-Time Covert Timing Channel Detection in a Networked Virtual Environment A. Liu, J. Chen and H. Wechsler George Mason University, Fairfax, Virginia, USA

04:00pm - 04:45pm: IFIP WG 11.9 Business Meeting

06:00pm - 08:00pm: Dinner (Smoky Bones, 303 N. Alafaya Trail; Tel: (407) 249-2009) Meet in Hotel Lobby @ 05:45pm for Car Pooling

January 29, 2013 (Tuesday)

07:00am - 08:15am: Breakfast (Hotel Radisson University)

08:15am - 09:45am: Session 5: Internet Crime Investigations II

Chair: David Baker, The MITRE Corporation, McLean, Virginia, USA

Detection of Evolving Money Laundering Schemes

M. Mehmet and D. Wijesekera

George Mason University, Fairfax, Virginia

Where Did Your Currency Note Come From?

A. Sarkar, R. Verma and G. Gupta

Indraprastha Institute of Information Technology Delhi, India

A Generic Bayesian Belief Model for Similar Cyber Crimes

H. Tse, K.-P. Chow and M. Kwan

University of Hong Kong, Hong Kong, China

09:45am - 10:00am: Break

10:00am - 11:30am: Session 6: Forensic Techniques II

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

Security Analysis and Decryption of Lion Full Disk Encryption

O. Choudary, F. Grobert and J. Metz

University of Cambridge, Cambridge, United Kingdom

Quantifying Windows File Slack in Size and Stability

M. Mulazzani, S. Neuner, P. Kieseberg, M. Huber, S. Schrittwieser and E. Weippl

SBA Research, Vienna, Austria

Using Normalized Compression Distance for File Fragment Analysis

S. Axelsson, K. Bajwa and M. Srikanth

Blekinge Institute of Technology, Karlskrona, Sweden

11:40am - 01:00pm: Lunch (Golden Corral, 11731 E. Colonial Drive; Tel: (407) 902-2979)

01:15pm - 02:45pm: Session 7: Forensic Techniques III

Chair: Jill Slay, University of South Australia, Mawson Lakes, Australia

Hash-Based File Content Identification Using Distributed Systems

Y. Yannikos, J. Schlüßler, M. Steinebach, C. Winter and K. Graffi

Fraunhofer Institute for Secure Information Technology, Darmstadt, Germany

University of Paderborn, Paderborn, Germany

University of Düsseldorf, Düsseldorf, Germany

Reducing Time Cost in Hashing Operations

F. Breitinger and K. Petrov

Darmstadt University of Applied Sciences, Darmstadt, Germany

Bulgarian Academy of Sciences, Sofia, Bulgaria

Analysis of Forensic Super Timelines

S. Esposito and G. Peterson

Air Force Institute of Technology, Wright-Patterson Air Force Base, Ohio, USA

02:45pm - 03:00pm: Break

January 29, 2013 (Tuesday) (continued)

03:00pm - 04:30pm: Session 8: Forensic Processes

Chair: Martin Mulazzani, SBA Research, Vienna, Austria

Using a Goal-Driven Approach in the Digital Investigation of a Questioned Contract

C. Blackwell, S. Islam and B. Aziz

Oxford Brookes University, Oxford, United Kingdom

University of East London, London, United Kingdom

Portsmouth University, Portsmouth, United Kingdom

Using Cognitive Approaches for Holistic Digital Forensic Readiness Planning

A. Pooe and L. Labuschagne

University of South Africa, Pretoria, South Africa

Towards a Harmonized Digital Forensic Investigation Readiness Process Model

A. Valjarevic and H. Venter

University of Pretoria, Pretoria, South Africa

06:00pm - 08:00pm: Dinner (Miller's Ale House, 641 N. Alafaya Trail; Tel: (407) 736-0333) Meet in Hotel Lobby @ 05:45pm for Car Pooling

January 30, 2012 (Wednesday)

07:00am - 08:00am: Breakfast (Hotel Radisson University)

08:15am - 09:45am: Session 9: Novel Techniques

Chair: David Dampier, Mississippi State University, Mississippi State, Mississippi, USA

A Dataset for Active Linguistic Authentication

P. Juola, J. Noecker, A. Stolerman, M. Ryan, P. Brennan and R. Greenstadt

Juola and Associates, Munhall, Pennsylvania, USA

Drexel University, Philadelphia, Pennsylvania, USA

Log File Analysis with Context-Free Grammars

G. Bosman and S. Bruner

University of Pretoria, Pretoria, South Africa

Merging Evidence Sub Graphs to Create an Integrated Evidence Graph

C. Liu, A. Singhal and D. Wijesekera

George Mason University, Fairfax, Virginia, USA

National Institute of Standards and Technology, Gaithersburg, Maryland, USA

09:45am - 10:00am: Break

10:00am - 11:00am: Session 10: Evaluation of Forensic Models and Tools

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

A Comparison of Forensic Toolkits and Mass Market Data Recovery Applications

J. Buchanan-Wollaston, T. Storer and W. Glisson

University of Glasgow, Glasgow, United Kingdom

Evaluation of the Semi-Automated Crime-Specific Digital Triage Process Model

G. Cantrell and D. Dampier

Dixie State College, St. George, Utah, USA

Mississippi State University, Mississippi State, Mississippi, USA

11:30am - 12:30pm: Lunch (Golden Corral, 11731 E. Colonial Drive; Tel: (407) 902-2979)