

**Eighth Annual IFIP WG 11.9 International Conference on Digital Forensics**  
**Sanlam Auditorium/Conference Center**  
**University of Pretoria**  
**Pretoria, South Africa**  
**January 2 - 5, 2012**

**January 2, 2012 (Monday)**

**6:00pm - 9:30pm: Dinner**

(Tuscan Barbecue, 78 George Storrar Drive, Groenkloof, Pretoria; Tel: +27 12 460 1238)

(Meet in hotel lobby @ 5:30pm for bus to restaurant)

**January 3, 2012 (Tuesday)**

**7:00am - 8:30am: Breakfast (City Lodge Hotel, 407 Hilda Street, Hatfield, Pretoria; Tel: +27 12 423 5000)**

**8:45am - 9:00am: Welcoming Remarks**

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

**9:00am - 10:00am: Keynote Lecture**

*Who Will Guard the Guardians?*

David Klatzow

Forensic Practitioner, Cape Town, South Africa

**10:00am - 11:00am: Session 1: The Digital Forensic Process - I**

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

*On the Creation of Reliable Digital Evidence*

Carsten Rudolph, Aaron Alva, Barbara Endicott-Popovsky and John Christiansen

Fraunhofer Institute for Secure Information Technology, Darmstadt, Germany

University of Washington, Seattle, Washington, USA

Christiansen IT Law, Seattle, Washington, USA

*The Explore, Investigate and Correlate Process for Information Visualization in Digital Forensics*

Grant Osborne, Hannah Thinyane and Jill Slay

University of South Australia, Mawson Lakes, Australia

**11:00am - 11:30am: Break**

**11:30am - 12:30pm: Session 2: The Digital Forensic Process - II**

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

*Scalable Data Correlation*

Vassil Roussev

University of New Orleans, New Orleans, Louisiana, USA

*Using Performance Monitoring Software to Implement Digital Forensics Readiness*

Francois Van Staden and Hein Venter

University of Pretoria, Pretoria, South Africa

**12:30pm - 1:30pm: Lunch (Adler's Restaurant, University of Pretoria)**

**1:30pm - 3:00pm: Session 3: Forensic Techniques - I**

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

*Offline Forensic Tracking Using Multi-Model Trace Reconstruction*

Saif Al-Kuwari and Stephen Wolthusen

Ministry of Foreign Affairs, Doha, Qatar

Royal Holloway, University of London, London, United Kingdom

Gjovik University College, Gjovik, Norway

## **January 3, 2012 (Tuesday) (continued)**

### *Context-Based File Block Classification*

Luigi Sportiello and Stefano Zanero  
Polytechnic of Milan, Milan, Italy

### *Reasoning About Evidence Using Bayesian Networks*

Hayson Tse, Kam-Pui Chow and Michael Kwan  
University of Hong Kong, Hong Kong, China

### **3:00pm - 3:30pm: Break**

### **3:30pm - 5:00pm: Session 4: Database Forensics**

Chair: Stephen Wolthusen, Royal Holloway, University of London, London, United Kingdom

### *Reconstruction in Database Forensics*

Oluwasola Fasan and Martin Olivier  
University of Pretoria, Pretoria, South Africa

### *Application of Data Hiding Techniques in a Database Environment*

Heloise Pieterse  
University of Pretoria, Pretoria, South Africa

### *A Log File Digital Forensic Model*

Himal Lalla, Tendai Sanyamahwe, Stephen Flowerday and Paul Tarwireyi  
University of Fort Hare, East London, South Africa

### **6:00pm - 9:30pm: Dinner**

**(Moyo, Fountains Valley Road, Groenkloof Nature Reserve, Groenkloof, Pretoria; Tel: +27 12 341 5729)  
(Meet in hotel lobby @ 5:30pm for bus to restaurant)**

## **January 4, 2012 (Wednesday)**

**7:00am - 8:30am: Breakfast (City Lodge Hotel, 407 Hilda Street, Hatfield, Pretoria; Tel: +27 12 423 5000)**

### **8:45am - 10:15am: Session 5: Cloud Forensics**

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

*Finding File Fragments in the Cloud*

Dirk Ras and Martin Olivier

University of Pretoria, Pretoria, South Africa

*Cloud Forensics: Key Terms for Service Level Agreements*

Keyun Ruan, Joshua James, Joe Carthy and Tahar Kechadi

University College Dublin, Dublin, Ireland

*Isolation: Stuck in the Cloud*

Waldo Delpont and Martin Olivier

University of Pretoria, Pretoria, South Africa

### **10:15am - 10:30am: Break**

### **10:30am - 11:30am: Session 6: Forensic Techniques - II**

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

*Evidence Collection for Forensic Investigations of Peer-to-Peer Systems*

Teja Myneedu and Yong Guan

Iowa State University, Ames, Iowa, USA

*A Formal Analysis of the Foxy Peer-to-Peer Network Investigation*

Ricci Jeong, Kam-Pui Chow and Pierre Lai

University of Hong Kong, Hong Kong, China

### **11:30am - 12:30pm: Lunch (Adler's Restaurant, University of Pretoria)**

### **12:30pm - 6:30pm: Safari**

**(Rietvlei Nature Reserve, Rietvlei, Pretoria; Tel: +27 12 345 2274)**

**(Meet in the Conference Center parking lot @ 12:30pm for bus to Rietvlei Nature Reserve)**

### **6:30pm - 9:30pm: Dinner**

**(Stone Cradle, Plot 72, Game Reserve Road, Doornkloof, Pretoria; Tel: +27 73 266 2555)**

## **January 5, 2012 (Thursday)**

**7:00am - 8:30am: Breakfast (City Lodge Hotel, 407 Hilda Street, Hatfield, Pretoria; Tel: +27 12 423 5000)**

### **8:45am - 10:15am: Session 7: Cell Phone Forensics**

Chair: Vassil Roussev, University of New Orleans, New Orleans, USA

*An Open Architecture for Digital Evidence Acquisition from Smart Phones*

Lamine Aouad, Tahar Kechadi, Justin Trentesaux and An Le Khac  
University College Dublin, Dublin, Ireland

*Forensic Acquisition of Location Data from Android Smartphones*

Felix Freiling, Sven Schmitt and Michael Spreitzenbarth  
Friedrich-Alexander University, Erlangen-Nuremberg, Germany

*MTK-Based Chinese Shanzai Mobile Phone Forensics*

Junbin Fang, Zoe Jiang, Kam-Pui Chow, Siu-Ming Yiu, Lucas Hui and Gang Zhou  
University of Hong Kong, Hong Kong, China  
Harbin Institute of Technology, Shenzhen, China

### **10:15am - 10:45am: Break**

### **10:45am - 11:45am: Session 8: Advanced Topics - I**

Chair: Michael Kwan, University of Hong Kong, Hong Kong, China

*XML Conversion of the Windows Registry for Forensic Processing and Distribution*

Alex Nelson  
Naval Postgraduate School, Monterey, California, USA

*Improving Hash Sets in Digital Forensics*

Marcelo Ruback, Bruno Hoelz and Celia Ralha  
Brazilian Federal Police, Brasilia, Brazil  
University of Brasilia, Brasilia, Brazil

### **11:45am - 1:30pm: Lunch (Adler's Restaurant, University of Pretoria)**

### **1:30pm - 2:30pm: Session 9: Advanced Topics - II**

Chair: Yong Guan, Iowa State University, Iowa, USA

*Social Network Forensics: Tapping the Data Pool of Social Networks*

Martin Mulazzani, Markus Huber and Edgar Weippl  
Technical University of Vienna, Vienna, Austria  
SBA Research, Vienna, Austria

*Data Extraction from 3.5" Hard Disk Drives with Multiple Platters*

Toshinobu Yasuhira, Kazuhiro Nishimura and Tomofumi Koida  
National Police Agency, Tokyo, Japan

### **2:30pm - 3:00pm: Break**

### **3:00pm - 4:00pm: Session 10: Advanced Topics - III**

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

*Cracking Bitmap Steganography*

Matthew Seyer, Josh Rios and Nicole Ibrahim  
Oklahoma State University Institute of Technology, Okmulgee, Oklahoma, USA

*Using Internal Depth to Aid Stereoscopic Image Splicing Detection*

Mark-Anthony Fouche and Martin Olivier  
University of Pretoria, Pretoria, South Africa