# Sixth Annual IFIP WG 11.9 International Conference on Digital Forensics

Council Chamber
University of Hong Kong
Pok Fu Lam Road
Hong Kong
January 3 - 6, 2010

# January 3, 2010 (Sunday)

6:30pm - 9:30pm: Conference Dinner

(Jumbo Floating Restaurant, Shum Wan Pier Drive, Wong Chuk Hang, Aberdeen; Tel: +852 2553 9111)

(Meet in hotel lobby @ 6:00pm for bus to restaurant)

January 4, 2010 (Monday)

7:00am - 8:30am: Breakfast (Courtyard Marriott Hong Kong Hotel)

(Meet in hotel lobby @ 8:30am for bus to conference venue)

9:00am - 9:10am: Welcoming Remarks

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

9:10am - 9:30am: Opening Speech

E-Crime and Digital Forensics in Hong Kong

Clarence To Chun-Wai, Assistant Commissioner (Crime), Hong Kong Police, Hong Kong

9:30am - 10:30am: Keynote Lecture

Digital Forensics Research in Mainland China

Rongsheng Xu, Chinese Academy of Sciences, Beijing, China;

Chairman, China Computer Forensics Research Center, Beijing, China

10:30am - 10:45am: Break

#### 10:45am - 11:45am: Session 1: Fraud Investigations

Chair: Mark Pollitt, National Center for Forensic Science, University of Central Florida, Orlando, Florida, USA

Detecting Illegal Business Schemes in Choreographed Web Services

Murat Gunestas, Duminda Wijesekera and Murad Mehmet

General Directorate of Security, Ankara, Turkey

George Mason University, Fairfax, Virginia, USA

Internet Auction Fraud Investigations

Michael Kwan, Richard Overill, Kam-Pui Chow, Jantje Siloman, Hayson Tse, Frank Law and Pierre Lai

University of Hong Kong, Hong Kong

King's College, London, United Kingdom

## 11:45am - 12:45pm: Session 2: Advanced Forensic Techniques

Chair: Richard Overill, King's College, London, United Kingdom

Consistency Study of the Windows Registry

Yuandong Zhu, Joshua James and Pavel Gladyshev

University College Dublin, Dublin, Ireland

A Platform-Independent Digital Watermarking Scheme for Detecting the Unauthorized Use of Virtual Machines

Kumiko Tadano, Masahiro Kawato, Ryo Furukawa, Fumio Machida and Yoshiharu Maeno

NEC Corporation, Kawasaki, Japan

#### 12:45pm - 2:00pm: Lunch (Maxim's, 4/F Chong Yuet Ming Amenities Centre, University of Hong Kong)

## 2:00pm - 3:00pm: Keynote Lecture

A History of Digital Forensics

Mark Pollitt, National Center for Forensic Science, University of Central Florida, Orlando, Florida, USA;

Former Unit Chief, CART, Federal Bureau of Investigation, Washington, DC, USA

# January 4, 2010 (Monday) (continued)

3:00pm - 3:30pm: Break

3:30pm - 5:00pm: Session 3: Live Forensics

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

A Compiled Memory Analysis Tool James Okolica and Gilbert Peterson

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

Uncertainty in Live Forensics Antonio Savoldi, Paolo Gubian and Isao Echizen University of Brescia, Brescia, Italy National Institute of Informatics, Tokyo, Japan

Identifying Static and Dynamic Volatile Memory Data from Multiple Dumps for Live Forensics
Frank Law, Ping-Fai Chan, Siu-Ming Yiu, Benjamin Tang, Pierre Lai, Kam-Pui Chow, Ricci Ieong, Michael Kwan, Wing-Kai

Hon and Lucas Hui

University of Hong Kong, Hong Kong

National Tsing Hua University, Hsinchu, Taiwan

7:30pm - 9:30pm: Conference Dinner and Cruise (Harbour Cruise-Bauhinia, North Point Ferry Pier; Tel: +852 2802 2886) (Meet at conference venue @ 5:45pm for bus to restaurant)

## January 5, 2010 (Tuesday)

## 7:00am - 8:30am: Breakfast (Courtyard Marriott Hong Kong Hotel)

(Meet in hotel lobby @ 8:30am for bus to conference venue)

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

Chair: Philip Beh, President, Hong Kong Forensic Science Society;

Professor of Pathology, University of Hong Kong, Hong Kong

International Issues Facing Digital and Multimedia Forensic Sciences

Carol Henderson, Stetson University College of Law, Gulfport, Florida, USA;

Immediate Past President, American Association of Forensic Sciences, Colorado Springs, Colorado, USA

## 10:00am - 11:00am: Session 4: Legal Issues and Privacy

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

On the Use of a Local Search Warrant to Acquire Digital Evidence Stored Overseas via the Internet

Kenny Wang

University of Hong Kong, Hong Kong

Analysis of Green Dam Youth-Escort from a Forensic Perspective

Frankie Li, Hilton Chan, Kam-Pui Chow and Pierre Lai

University of Hong Kong, Hong Kong

#### 11:00am - 11:30am: Break

#### 11:30am - 12:30pm: Session 5: Evidence Storage and Analysis

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

A Refined Evidence Container Solution for Accurate Data Representation and Provenance

Bradley Schatz and Michael Cohen

Queensland University of Technology, Brisbane, Australia

Australian Federal Police, Brisbane, Australia

Data Fingerprinting with Similarity Digests

Vassil Roussev

University of New Orleans, New Orleans, Louisiana, USA

#### 12:30pm - 2:00pm: Lunch (Maxim's, 4/F Chong Yuet Ming Amenities Centre, University of Hong Kong)

#### 2:00pm - 3:00pm: Keynote Lecture

The Science of Digital Forensic Examination

Fred Cohen, Chief Executive Officer, Fred Cohen and Associates, Livermore, California, USA;

President, California Sciences Institute, Livermore, California

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

### 3:30pm - 5:00pm: Session 6: Advanced Topics

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

Forensic Analysis of a Sony PlayStation 3 Gaming Console

Scott Conrad, Greg Dorn and Philip Craiger

National Center for Forensic Science, University of Central Florida, Orlando, Florida, USA

Modeling of a Readiness Approach for WLAN Digital Forensics

Sipho Ngobeni, Hein Venter and Ivan Burke

University of Pretoria, Pretoria, South Africa

Virtual Expansion of Rainbow Tables

Vrizlynn Thing

Institute for Infocomm Research, Singapore

## 7:00pm - 9:00pm: Conference Dinner

(Café Deco Hong Kong, Peak Galleria, 118 Peak Road, The Peak; Tel: +852 2849 5111)

(Meet at conference venue @ 5:30pm for bus to restaurant)

## January 6, 2010 (Wednesday)

7:00am - 8:30am: Breakfast (Courtyard Marriott Hong Kong Hotel) (Meet in hotel lobby @ 8:30am for bus to conference venue)

9:00am - 10:00am: Session 7: Evidence Collection

Chair: Antonio Savoldi, University of Brescia, Brescia, Italy

Data Recovery Function Testing for Computer Forensic Investigation Tools

Yinghua Guo and Jill Slay

University of South Australia, Adelaide, Australia

Digital Forensics Requirements in China: A Case Study Using the Digital Evidence Search Kit (DESK) Ying Yang, Kam-Pui Chow, Lucas Hui, Chunxiao Wang, Lijuan Chen, Zhenya Chen and Jenny Chen Shandong Computer Science Center, Jinan, China University of Hong Kong, Hong Kong

10:00am - 10:15am: Break

10:15am - 11:45am: Session 8: Advanced Topics

Chair: William Hamill, University of Tulsa, Tulsa, Oklahoma, USA

Forensic Tracking and Mobility Prediction in Vehicular Networks

Saif Al-Kuwari and Stephen Wolthusen

Royal Holloway, University of London, London, United Kingdom

Gjovik University College, Gjovik, Norway

Identifying Initial Seeders in Peer-to-Peer Networks

Ricci Ieong, Pierre Lai, Kam-Pui Chow, Michael Kwan and Frank Law

University of Hong Kong, Hong Kong

A Visualization Method for Tracing Pathways of Confidential Information

Yuki Nakayama, Seiji Shibaguchi and Kenichi Okada

Keio University, Yokohama City, Japan

12:00pm - 2:00pm: Lunch

(Shing Hin Restaurant, 6/F, Hong Kong Police Headquarters, Arsenal House, Wan Chai) (Meet at conference venue @ 12:00pm for bus to restaurant and Police Headquarters)

2:00pm - 4:00pm: Tour of Computer Forensics Laboratory, Technology Crime Division, Hong Kong Police