Thirteenth Annual IFIP WG 11.9 International Conference on Digital Forensics
Orlando, Florida
January 30 – February 1, 2017

January 29, 2017 (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 30, 2017 (Monday)

06:30am - 08:20am: Breakfast (Holiday Inn Orlando East – UCF Area)

08:20am - 08:30am: Welcoming Remarks and Logistics

08:30am - 09:30am: Keynote Lecture
A Scientific Approach to Fighting Web-Based Cyber Crime
Tyler Moore, University of Tulsa, Tulsa, Oklahoma, USA

09:30am - 10:30am: Session 1: Digital Forensic Examinations
Chair: Gilbert Peterson, Air Force Institute of Technology, Wright-Patterson Air Force Base, Ohio, USA

Establishing Findings in Digital Forensic Examinations
Oluwasayo Oyelami and Martin Olivier
University of Pretoria, Pretoria, South Africa

A Model for Digital Evidence Admissibility Assessment
Albert Antwi-Boasiako and Hein Venter
e-Crime Bureau, Accra, Ghana
University of Pretoria, Pretoria, South Africa

10:30am - 10:45am: Break

10:45am - 11:45am: Session 2: Malware Forensics
Chair: Martin Olivier, University of Pretoria, Pretoria, South Africa

Categorizing Mobile Device Malware Based on System Side-Effects
Zachary Grimmett and Sujeet Shenoi
University of Tulsa, Tulsa, Oklahoma, USA

A Behavioral-Based Approach for Detecting Malware
Rayan Mosli, Rui Li, Bo Yuan and Yin Pan
Rochester Institute of Technology, Rochester, New York, USA
King Abdulaziz University, Jeddah, Saudi Arabia

11:45am - 01:00pm: Lunch (Golden Corral, 11731 E. Colonial Drive; Tel: (407) 902-2979)

January 30, 2017 (Monday) (continued)

01:15pm - 02:15pm: Session 3: Forensic Analysis Methodologies
Chair: Kam-Pui Chow, University of Hong Kong, Hong Kong, China

A Tactical Forensic Analysis Methodology for Software Defined Networking Switches
Tommy Chin and Kaiqi Xiong
Rochester Institute of Technology, Rochester, New York, USA
University of South Florida, Tampa, Florida, USA

Forensic Analysis of an Amazon Fire TV Stick
Logan Morrison, Huw Read, Iain Sutherland and Konstantinos Xynos
Norwich University, Northfield, Vermont, USA
Noroff University College, Kristiansand, Norway
DarkMatter, Dubai, United Arab Emirates

02:15pm - 02:45pm: Break

02:45pm - 03:15pm: Session 4: Forensic Techniques I
Chair: Anoop Singhal, National Institute of Standards and Technology, Gaithersburg, Maryland, USA

Insider Threat Detection Using Time-Series-Based Raw Disk Forensic Analysis
Nicole Beebe, Lishu Liu and Zi Ye
University of Texas at San Antonio, San Antonio, Texas, USA

03:15pm - 04:15pm: IFIP WG 11.9 Business Meeting

06:00pm - 08:30pm: Dinner (Smoky Bones, 303 N. Alafaya Trail; Tel: (407) 249-2009)
Meet in Hotel Lobby @ 05:45pm for Car Pooling

January 31, 2017 (Tuesday)

06:30am - 08:30am: Breakfast (Holiday Inn Orlando East – UCF Area)

08:45am - 09:45am: Keynote Lecture
It's an Obstacle Course, Not a Race – Your Future in Digital Forensics
Mark Pollitt, Digital Evidence Professional Services, Ellicott City, Maryland, USA

09:45am - 10:15am: Session 5: Fraud Detection
Chair: Sudhir Aggarwal, Florida State University, Tallahassee, Florida, USA

Detecting Innovative Criminal Schemes Involving Fraudulent Bank Checks
Saheb Chhabra, Gaurav Gupta and Monika Gupta
Indraprastha Institute of Information Technology, New Delhi, India
Ministry of Electronics and Information Technology, New Delhi, India

10:15am - 10:30am: Break

10:30am - 11:30am: Session 6: Mobile Device Forensics
Chair: Stefan Axelsson, Norwegian University of Science and Technology, Gjovik, Norway

Authentic Smartphone Evidence
Heloise Pieterse, Martin Olivier and Renier van Heerden
Council of Scientific and Industrial Research, Pretoria, South Africa
University of Pretoria, Pretoria, South Africa

Component-API Linkage for Android Malware Detection
Zhaoheng Yang, Frank Breitinger and Ibrahim Baggili
University of New Haven, New Haven, Connecticut, USA

11:30am - 01:00pm: Lunch (Golden Corral, 11731 E. Colonial Drive; Tel: (407) 902-2979)

01:15pm - 02:15pm: Session 7: Forensic Techniques II
Chair: Al Holt, National Security Agency, Fort Meade, Maryland, USA

Significant Data Region Identification and Forensic Analysis of Large Storage Drives Using the k-Means Algorithm
Nitesh Bharadwaj and Upasna Singh
Defence Institute of Advanced Technology, Pune, India

Semantic Video Carving for Digital Forensics Using Perceptual Hash and Optical Flow
Junbin Fang, Sijin Li, Guikai Xi, Zoe Jiang, Siu-Ming Yiu, Liyang Yu, Xuan Wang, Qi Han and Qiong Li
Jinan University, Guangzhou, China
Harbin Institute of Technology Shenzhen, China
University of Hong Kong, Hong Kong, China

02:15pm - 02:30pm: Break

02:30pm - 04:00pm: Session 8: Novel Approaches
Chair: Gaurav Gupta, Ministry of Electronics and Information Technology, New Delhi, India

Anti-Forensic Threat Modeling
Bruno Hoelz and Marcelo Maues
Centro de Perıcias Cientıficas Renato Chaves, Maraba, Brazil
National Institute of Criminalistics, Brasilia, Brazil

A Collusion Attack on the Lightning Network – Implications for Forensics
Dmytro Piatkivskyi, Stefan Axelsson and Mariusz Nowostawski
Norwegian University of Science and Technology, Gjovik, Norway

Using Personal Information for Targeted Attacks in Grammar-Based Probabilistic Password Cracking
Shiva Houshmand and Sudhir Aggarwal
Southern Illinois University, Carbondale, Illinois, USA
Florida State University, Tallahassee, Florida, USA

06:00pm - 08:30pm: Dinner (Miller's Ale House, 641 N. Alafaya Trail; Tel: (407) 736-0333)
Meet in Hotel Lobby @ 05:45pm for Car Pooling

February 1, 2017 (Wednesday)

06:30am - 08:30am: Breakfast (Holiday Inn Orlando East – UCF Area)

08:45am - 10:15am: Session 9: Forensic Techniques III
Chair: Mark Pollitt, Digital Evidence Professional Services, Ellicott City, Maryland, USA

Applying Machine Learning to Programmable Logic Controller Event Detection and Logging
Kwai-Keung Yau and Kam-Pui Chow
University of Hong Kong, Hong Kong, China

Automated File Provenance Collection
Ryan Good and Gilbert Peterson
Air Force Institute of Technology, Wright-Patterson AFB, Ohio, USA

Identifying Evidence for Implementing a Cloud Forensic Analysis Framework
Changwei Liu, Anoop Singhal and Duminda Wijesekera
George Mason University, Fairfax, Virginia, USA
National Institute of Standards and Technology, Gaithersburg, Maryland, USA

11:00am - 12:15pm: Lunch (Golden Corral, 11731 E. Colonial Drive; Tel: (407) 902-2979)