

# SICSA Conference Report - Cyberforensics 2014

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## 1. Introduction

The 4th International Conference on Cybercrime, Security and Digital Forensics (Cyberforensics 2014) was held at the University of Strathclyde on 23rd and 24th June. As indicated below, attendees came from a wide geographical area as well as a variety of sectors, with significant engagement with research students from Scottish universities. Speakers ranged from academics, to PhD students, and individuals from the private and public sectors.

## 2. Registrations

The conference attracted 35 attendees. This included thirteen PhD students from SICSA institutions (University of Strathclyde: 6; Abertay University: 4; Glasgow Caledonian University: 2; University of Edinburgh: 1). In return for SICSA support for the conference, these students were not charged for conference attendance and treated as full conference registrants. The remaining conference attendees comprised nine academics from seven universities, five delegates from the private sector and two delegates from Police Scotland. In addition, the delegates included a PhD student from the University of East London, and a mix of five local final year undergraduate and MSc students.

## 3. Conference programme

The event was opened by Professor James Fraser, Director of the Centre for Forensic Science (University of Strathclyde). His welcome was followed by the first of two keynote speakers, Scott Ainslie (Global Technology Services, IBM Australia), who gave a broad ranging perspective on security consultancy from the vantage of a senior IBM consultant. His talk was entitled 'Security Intelligence - Forensics and Big Data; can we be intelligently proactive?'.

The keynote presentation was followed by the first paper session. This comprised the following talks:

- Lysay A. Shepherd, Jacqueline Archibald and R. Ian Ferguson (University of Abertay): Reducing Risky Security Behaviours: Utilising Affective Feedback To Educate Users
- Fathiya Al Izki and George Weir (University of Strathclyde): Information Security and Digital Divide in the Arab World

The second paper session included two presentations:

- Sarah Holmes (Security & Resilience, RBS): Open Source Forensic Management Software
- Richard Connor, Stewart MacKenzie-Leigh and George Weir (University of Strathclyde): The Forensic Detection of Very Similar Images

The afternoon began with a session that included two invited presentations:

- Eamonn Keane (Specialist Crime Division, Cybercrime, Police Scotland): The current cybercrime threat landscape
- Alex McLaren (Complex Financials Ltd.): Technology, a tool for the fraudster

The first day concluded with a further invited talk: David Cannings (Executive Principal for Cyber Threat Defence, NCC Group): The role of forensics in modern incident response

Day two of the conference began with a second keynote talk from Dr. Barry Cartwright (School of Criminology and International CyberCrime Research Centre, Simon Fraser University, Vancouver, Canada), who gave an interesting overview of developments in cyberlaw from a Canadian perspective. His presentation was entitled: "The Battle-Line between 'Cyber Libertarians' and 'Cyber Cops': The Changing Face of Canadian Cyber Law". The next session comprised two talks:

- Michelle Govan and Kenneth Ovens (Glasgow Caledonian University): Temporal Analysis Anomalies with iOS iMessage Communication Exchange
- Ethan Bayne, Ian Ferguson and John Isaacs (University of Abertay): OpenCL Acceleration of Digital Forensic Methods

This was followed by a further invited talk: James Fraser (University of Strathclyde): Digital Forensics: Lessons from Other Areas of Forensic Practice

The afternoon sessions continued with further talks from paper submissions:

- James Sutherland, Natalie Coull and Allan MacLeod (University of Abertay): CPU covert channel accessible from JavaScript
- Diane Gan and Gary Kelly (University of Greenwich): Analysis of Attacks Using a Honeypot
- Najla Etaher and George Weir (University of Strathclyde): Understanding the Threat of Banking Malware
- Kyriakos Sergiou and Ameer-Al-Nemrat (University of East London): Investigations in Black-box Penetration Techniques on Wireless Networks - Gathering Digital Evidence against Cyber-Intrusions
- Katherine Darroch and George R S Weir (University of Strathclyde): Measuring Sexually Explicit Content

The conference closed with a panel discussion led by the two keynote speakers (Scott Ainslie and Barry Cartwright).

#### **4. Letter of appreciation**

Following the conference, the attached letter of appreciation from Scott Ainslie was received by the conference chair.

Mr Scott Ainslie  
PO Box 4398  
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AUSTRALIA

15 August 2014

Dr George R. S. Weir  
Department of Computer & Information Sciences  
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Dear George.

### **LETTER OF APPRECIATION**

I want to take this opportunity to express my gratitude and appreciation to the University of Strathclyde and the Programme Committee for the invitation to speak at the 4<sup>th</sup> International Conference on Cybercrime, Digital Forensics and Computer Security held over the period 23<sup>rd</sup> and 24<sup>th</sup> June 2014.

I was delighted at the scope of the conference program and the variety of presenters, especially for a University whose reputation for computer science is not well known but is clearly on the rise. The nature of forensic science in computing is undergoing a significant revolution across the world as corporations and governments alike grapple with the complexities of data confidentiality, integrity and assurance. The transformation of modern technology has naturally attracted criminal elements who seek to exploit and leverage the global reliance upon information technology and consequently the detection and prevention of those elements is accelerating the need for forensic capabilities.

You are to be commended for the quality of the material presented and the relaxed informal environment in which the conference was conducted. I attend several conferences each year and find that a larger delegate attendance can detract from the ability of the delegates to interact with the presenters, losing the opportunity to absorb knowledge from the presenter and their material. The small number of delegates and attendees at your conference provided an excellent forum for interaction between the teachers and students, presenters and delegates that was appreciated by all who attended.

The presentations were of high order and I was most impressed with the presentations by several students whose first language and experience was clearly not from Glasgow. It was also with some pleasure to note that I wasn't the only person with language difficulty in the audience.

I must also express my thanks for your outstanding hospitality, and for the professional manner in which the University and the Department of Computer & Information Sciences conducted the event.

Please keep me informed on the progress of your courseware and syllabus, and perhaps the opportunity may arise for further information exchange as I intend to continue my close liaison with Federation University at Ballarat.

Please excuse my tardiness in drafting this letter of appreciation as I have only just returned home from a trip in the US. Please stay in touch and let's see where collaboration can take us on the journey ahead.

Sincerely,

Scott Ainslie.