Current Challenges and Future Research Areas for Digital Forensic Investigation
Friday, May 27, 2016
Conference Room EE405/ 12PM

Dr. Mark Scanlon
UCD School of Computer Science,
University College Dublin,
Belfield, Dublin 4, Ireland

Abstract:
Given the ever-increasing prevalence of technology in modern life, there is a corresponding increase in the likelihood of digital devices being pertinent to a criminal investigation or civil litigation. As a direct consequence, the number of investigations requiring digital forensic expertise is resulting in huge digital evidence backlogs being encountered by law enforcement agencies throughout the world. It can be anticipated that the number of cases requiring digital forensic analysis will greatly increase in the future. It is also likely that each case will require the analysis of an increasing number of devices including computers, smartphones, tablets, cloud-based services, Internet of Things devices, wearables, etc. The variety of new digital evidence sources pose new and challenging problems for the digital investigator from an identification, acquisition, storage and analysis perspective. This talk explores the current challenges contributing to the backlog in digital forensics from a technical standpoint and outlines a number of future research topics that could greatly contribute to a more efficient digital forensic process.

Bio:
Dr. Mark Scanlon is a Lecturer in the School of Computer Science, University College Dublin, Ireland. Dr. Scanlon is a Fulbright Scholar in Cybersecurity and Cybercrime Investigation and collaborates with Interpol for both research and case collaboration. Both his MSc and PhD are in the field of Remote Evidence Acquisition. His research interests include Remote Evidence Acquisition, Evidence Whitelisting \\& Data Deduplication, Cloud Forensics, File Synchronisation Service Forensics, Network Forensics and Digital Forensics Education. Dr. Scanlon is an active member of the digital forensics research community and is a keen editor, reviewer and conference organiser across a range of key journals and conferences in the field.