Invited Article F1:

Digital forensics: What's in a programme?

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Teaching and research in information technology (IT) is always a reflection of the ever changing landscape of change and continuous innovation. IT programmes also show how content evolves over time, and the emphasis shifts. The current 'digital forensics' buzz-word is not different from the former programming, applications, security, eBusiness and other ubiquitous buzz-words of the past; in fact digital forensics has swept up many of the curriculum remnants of the last decade into a market driven package of law, professionalism and IT technicality.

The first New Zealand university degree in the area (Master of Forensic Information Technology - MFIT) started in 2009 at the School of Computing and Mathematical Sciences (SCMS) at the Auckland University of Technology. The first year programme curriculum consists of four specialist subjects covering the New Zealand legal framework, professional expectations/ethics, cryptography and forensic tools, and of a selection of standard IT coursework (information security, networking, data mining, ubiquitous computing). The second year of the programme is fully dedicated to completing the required research thesis so that a student could demonstrate expertise in one area of forensic studies and hence invite the opportunity to be an expert witness to the court.

The three research articles published in this special journal section are based on three of the twelve thesis projects completed in the Digital Forensic Research Laboratories by the first MFIT student intake. The topics are diverse but each demonstrates the technical and compliance skills required in order to undertake a digital forensic investigation. The first article deals with the 'drag' race between different digital forensic software tools. How good are they and what trust may an expert put in them?

The second article reports on an investigation into GPS devices and the complexity of extracting evidence from a model prevalent in New Zealand. The third paper addresses the professional problem of forensic disk imaging. Does data compression make a difference?

Digital forensic studies complement the mainstream IT curriculum. The demands of the new market are met by the specialised graduate profile which puts the emphasis on a wide range of skills needed to deal with the different ways IT is 'humanised' through its uses and misuses. MFIT is a part of the family of master's degrees offered...
by SCMS. To the well established Master of Computer and Information Sciences, MFIT adds a new IT dimension - the concept of legal compliance, leading further away from the notion of studying IT for 'the sake of IT' (the 'geeky' approach).

A bubble usually bursts somewhere near the top of a hype cycle and then it will be time for another change in emphasis. Perhaps IT services in a cloud? The school is planning to start a Master of Service-oriented Computing in 2012!