

▼ Introduction to Digital Forensics – Pedagogy and Foundational Research Activity Minitrack

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Within the fields of computer science and software engineering greater attention is being given today to the broad topic of information assurance. This minitrack focuses on an emerging subspecialty within information assurance that is largely driven by software technology—that of Digital Forensics. Digital forensics involves the use of software, computer science, software engineering, and criminal justice procedures to explore and or investigate digital media with the objective of finding evidence to support a criminal or administrative case. It involves the preservation, identification, extraction, and documentation of computer or network evidence. This minitrack includes papers in two important general areas—digital forensics pedagogy at the university level and current research efforts involving digital forensics tools and techniques.

Many universities and community colleges have entered into digital forensics instruction and research over the past few years—not only within the United States, but also internationally. Papers selected for this minitrack provide a forum for presentation of

various approaches to teaching digital forensics, application of digital forensics, and current research efforts. Papers are included that address a graduate degree forensics program, lab support for digital forensics education, efforts underway by the National Institute of Standards and Technology in overcoming impediments to cell phone forensics, and a paper on fingerprinting the Skype (software that allows users to make telephone calls from their computer to others free of charge). A research effort in using FPGA technology to speed forensics investigation is also included as a “tools” paper. Two papers discuss university based research and application of forensics in investigating electronic crime and in performing forensics analysis of electronic voting machines.

This is an exciting new area bringing together an interesting mix of talent—computer science, law enforcement, judicial, computer engineering, and others in an effort to address computer crime. The papers in this minitrack are an excellent representation of this work.