B31   Credentialing the Digital and Multimedia Forensics Professional

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After attending this presentation, attendees will have gained an understanding of credentialing and its application to digital and multimedia forensic science as a profession, as well as the status of current credentialing efforts as they are evolving for digital and multimedia forensics.

This presentation will impact the forensic science community by providing criteria for assessing vendor-neutral credentials and examining several contenders for credentialing digital and multimedia forensics professionals.

Professions are characterized by some degree of monopoly rights to practice based on formal qualifications supervised by regulatory bodies with power to admit and discipline members of the profession.[1] Professional enjoy high status and prestige.[2] To be recognized as a professional, one has to acquire specialized knowledge through education, training, and experience, which has to be maintained through continuing education. Admissions are based on some combination of education, experience, and ability to pass an examination, while discipline is based on a code of ethics recognized as binding on the profession.

In the Anglo-American legal system, forensic science grew out of the need for juries to understand scientific, technical or other specialized evidence and its implications for resolution of legal issues.[3] The classical professions were medicine, law and divinity, and, to some extent, later evolved professions are modeled on them. Other occupations became professions in the United States, including surveying, actuarial science, dentistry, civil engineering, logistics, and accounting.[4] By 1900, architects, pharmacists, veterinarians, nurses, teachers, librarians, optometrists and social workers could claim to be professionals.[5]

Digital and multimedia forensics is the newest entry into the forensic science profession and is currently developing credentials and processes for awarding and recognizing those credentials and disciplining their abuse. Courses and programs in digital and multimedia forensics are currently available or being developed at many colleges and universities. Some States are requiring digital and multimedia investigators to hold private investigator licenses. Some vendor-specific or tool-specific certifications are available.

Of particular interest are the development of vendor-neutral certifications that assess breadth of knowledge and depth of experience, and which require adherence to a code of ethics and continuing education. The presentation will compare and contrast the GIAC Certified Forensic Analyst certification offered by SANS, Computer Hacking Forensic Investigator certification offered by the EC-Council, Certified Forensic Computer Examiner certification offered by the International Association of Computer Investigative Specialists, Certified Computer Examiner certification offered by the International Society of Forensic Computer Examiners, Digital Forensic Certified Practitioner certification offered by the Digital Forensics Certification Board, and the newest entry, Cyber Forensics Professional Certification offered by (ISC)^{2TM}.

References:

1. Bullock, Alan & Stephen Trombley, *The New Fontana Dictionary of Modern Thought, London: Harper-Collins*, 1999, p.689.
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3. Baker, David W., Brothers, Samuel I., Geradts, Zeno J., Lacey, Douglas S. Nance, Kara L., Ryan, Daniel J., Sammons, John E, and Stephenson, Peter (2012) "Digital Evolution: History, Challenges and Future Directions for the Digital and Multimedia Sciences Section." In Douglas H. Ubelaker, Ed. (2012) *Global Forensic Science: Current Issues - Future Directions.* Colorado Springs: American Academy of Forensic Sciences. pp. 263-4.
4. Perks, R.W.(1993): *Accounting and Society*. Chapman & Hall (London), p. 3.
5. Buckley, J.W. & Buckley, M.H. (1974): *The Accounting Profession*. Melville, Los Angeles. Quoted by Perks, p.4.

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