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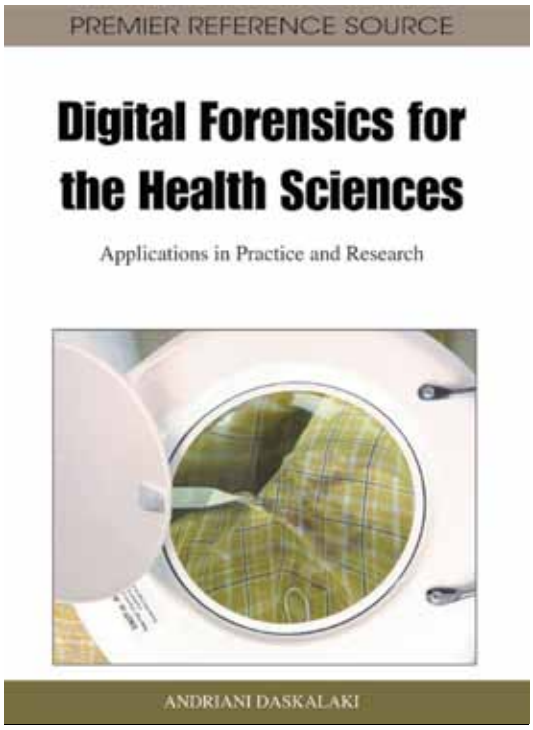
Released: March 2011

Digital Forensics for the Health Sciences: Applications in Practice and Research



ISBN: 9781609604837; © 2011; 418 pp.
Print: US $245.00 | Perpetual: US $365.00 | Print + Perpetual: US $490.00

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Digital forensics deals with the acquisition, preservation, analysis and presentation of electronic data. The detailed documentation and analysis of human data with 3D-imaging and processing techniques has led to qualitative improvements in forensic pathologic investigation and documentation.

Digital Forensics for the Health Sciences: Applications in Practice and Research discusses current applications of digital forensics in health sciences as well as the latest research in this area. This reference work covers basic concepts, best practices, common techniques, investigative challenges and, most importantly, examines the major limitations of current tools and discusses approaches that may help investigators deal with the ever-increasing size and complexity of forensic targets.

Topics Covered:

- Automating human identification
- Dental age assessment of children and adults
- Digital forensics best practices
- Digitized medical images
- Facial reconstruction
- Forensic anthropology
- Forensic odontology
- Forensics statistics
- Machine learning for clinical data processing
- Vertebral morphometry in forensics

Market: This premier publication is essential for all academic and research library reference collections. It is a crucial tool for academicians, researchers, and practitioners and is ideal for classroom use.

Andriani Daskalaki presently works in the field of molecular medicine and bioinformatics at the Max Planck Institute for Molecular Genetics in Berlin. She completed her PhD in 2002 on working in the applications of photodynamic therapy in the area of oral medicine from the Free University of Berlin. She received a two-year DAAD scholarship (1996-1998) for her research in the field of PDT. Dr. Daskalaki received a MS in Medical Informatics from TFH Berlin with her work in "Development of a documentation software for robot-assisted intraoral operations" and a MS degree in bioinformatics with her work in "Variance analysis of multifactor models in gene expression experiments with application to the identification of genetic markers for hypertension." She received a poster prize for her participation in the International Photodynamic Association Meeting in Nantes. She is the editor of the *Handbook of Research on Systems Biology Applications in Medicine* and has presented many oral presentations at national and international meetings. She is a founding member and committee member of the Greek Dental Laser Association. Her research interest areas include systems biology, PDT, and laser applications in dentistry.