

Information Assurance, Security, and Forensics

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ABSTRACT

The explosion of information acquisition and storage in digital formats has posed many challenges. These challenges have focused on Integrity, Authenticity, and Confidentiality. In this presentation, we will review various aspects of security definitions approaches and information life cycle. Identifying security threats and handling information security will be discussed from technical, legal, and management perspectives. A review of some research and educational activities in network security and forensics will be presented including the use of testbeds to verify concepts and collect data. Implications of using Information Assurance concepts to evaluate Data Centers from a Resilience Perspective will be presented in detail. Also, an example of a secure architecture for enterprise file management will be presented and discussed.

BRIEF BIOGRAPHY



Adel S. Elmaghraby is Professor and Chair of the Computer Engineering and Computer Science Department at the University of Louisville. He has also held appointments at the Software Engineering Institute - Carnegie-Mellon University, and the University of Wisconsin-Madison. He advised approximately 60 master's graduates and 20 doctoral graduates. His research contributions and consulting spans the areas of: Intelligent Multimedia Systems, Network and Information Security, PDCS, Visualization, and Simulation. He is a well-published author (over 200 publications), a public speaker, member of editorial boards, and technical reviewer. He has been recognized for his achievements by several professional organizations including a Golden Core Membership Award by the IEEE Computer Society. He is a senior member of the IEEE, a member of ACM and ISCA. He served a term as an elected ISCA Board member and currently is a Senior Member and an Associate editor for ISCA Journal. He is also an active member of the IEEE-CS Technical Activities Board and chair of the emerging technologies initiatives.