

Computer Forensics Investigation

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Abstract: This research explores the systematic science of identifying, preserving, examining, and presenting digital evidence in a legally acceptable manner. In an era of escalating cyber threats, computer forensics has become a vital component of modern investigative techniques for solving crimes such as data breaches and cyber fraud. This paper details a modular forensic investigation system design and evaluates the application of industry-standard tools like FTK Imager and Autopsy through simulated cybercrime cases. The study emphasizes the critical nature of maintaining the chain of custody and data integrity to ensure legal admissibility..

Keywords: Digital Forensics, Cybercrime Investigation, Data Integrity, Chain of Custody, Forensic Tools