描述

Digital Investigation 涵盖了一系列与犯罪和安全相关的话题。该出版物的主轴是数字证据，其核心品质包括来源、完整性和真实性。

这本广为引用的出版物推动了在法律目的下利用数字证据的创新和发展，包括刑事司法、事件响应、网络犯罪分析、网络风险管理、民事和法规事务以及隐私保护。相关研究领域包括法医科学、计算机科学、数据科学、人工智能和智能技术。

此期刊用于由调查机构和法医实验室、计算机安全团队、实践人员、研究者、开发者和律师从行业、执法、政府、学术界和军事界等分野来分享他们的知识和经验，包括在以下领域中的当前挑战和学习到的教训：

研究和发展：新方法的法医科学、计算机科学、数据科学和人工智能应用到数字证据和多媒体。新方法来应对数字调查中的挑战，包括在分析数字证据和多媒体中的应用研究、利用特定技术，并在应对和回应计算机安全事件中准备的。

网络犯罪调查：开发新的在线调查和分析方法，包括银行业诈骗、钓鱼、勒索软件和其他形式的网络欺诈。此外，研究未来涉及 peer-to-peer 支付和加密货币的网络犯罪活动。

网络风险管理：改善利用数字证据来应对信息系统的安全性漏洞，通过找到对零日攻击的应对方法和执行网络威胁情报。数字调查的技巧和发现对于得出事后的结论至关重要，这些是安全政策开发过程中的关键反馈因素，以及管理风险偏好。

案记：简要的调查案例研究，包括数字证据在数字调查、法医分析和事件响应中的实际应用。案记也可以描述当前的挑战，即实践者在网络犯罪和计算机安全中面临，突出需要进一步研究、开发或立法的领域。案记的格式是简单的。

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这本广为引用的出版物推动了在法律目的下利用数字证据的创新和发展，包括刑事司法、事件响应、网络犯罪分析、网络风险管理、民事和法规事务以及隐私保护。相关研究领域包括法医科学、计算机科学、数据科学、人工智能和智能技术。

此期刊用于由调查机构和法医实验室、计算机安全团队、实践人员、研究者、开发者和律师从行业、执法、政府、学术界和军事界等分野来分享他们的知识和经验，包括在以下领域中的当前挑战和学习到的教训：

研究和发展：新方法的法医科学、计算机科学、数据科学和人工智能应用到数字证据和多媒体。新方法来应对数字调查中的挑战，包括在分析数字证据和多媒体中的应用研究、利用特定技术，并在应对和回应计算机安全事件中准备的。

网络犯罪调查：开发新的在线调查和分析方法，包括银行业诈骗、钓鱼、勒索软件和其他形式的网络欺诈。此外，研究未来涉及 peer-to-peer 支付和加密货币的网络犯罪活动。

网络风险管理：改善利用数字证据来应对信息系统的安全性漏洞，通过找到对零日攻击的应对方法和执行网络威胁情报。数字调查的技巧和发现对于得出事后的结论至关重要，这些是安全政策开发过程中的关键反馈因素，以及管理风险偏好。

案记：简要的调查案例研究，包括数字证据在数字调查、法医分析和事件响应中的实际应用。案记也可以描述当前的挑战，即实践者在网络犯罪和计算机安全中面临，突出需要进一步研究、开发或立法的领域。案记的格式是简单的。
and short: case background, any technical or legal challenges, the digital evidence involved, processes and/or tools used, and outcomes (e.g., solutions, barriers, need for R&D).

**Scientific practices:** Novel approaches to strengthening the scientific foundation and rigor of digital investigations, and to increasing the reliability of and confidence in processes, analysis methods, results, and conclusions involving digital evidence.

**Effective practices:** Studies that assess new practices in digital investigations and propose effective approaches to handling and processing digital evidence.

**Survey papers:** Discussion of current methods and future needs relevant to digital investigations, including analysing digital evidence and multimedia from computers, smart technology, mobile phones, memory, malware, network traffic, as well as systems that support enterprises, telecommunications, and satellites. In addition, advanced approaches to analysing digital evidence and multimedia, including novel applications of artificial intelligence and data analytics.

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**Future challenges:** Analysis of new technologies, vulnerabilities and exploits which may create opportunities for criminality and/or computer security incidents, but which require further work in order to determine how their use can be investigated and the evidential opportunities they may create.

**Registered reports:** Studies that assess methods critically, and evaluating the reliability, statistical power, and reproducibility of results. Such reports can include tests and experiments with negative results, not just positive.

**Legal analysis and updates:** Carefully considered commentary by legal experts on recent cases involving digital evidence, forensic applications and computer security risk management, relevant legal developments, privacy issues, and legislative limitations.

**Evidence accessibility:** exploring safe, fair, and feasible methods of acquiring digital evidence from protected sources such as DRM, encrypted traffic, encrypted storage, and locked proprietary devices, while taking individual privacy and ethical aspects into consideration.

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GUIDE FOR AUTHORS

INTRODUCTION

Digital Investigation covers a broad array of subjects related to crime and security throughout the computerized world. The primary pillar of this publication is digital evidence, with the core qualities of provenance, integrity and authenticity.

This widely referenced publication promotes innovations and advances in utilizing digital evidence for legal purposes, including criminal justice, incident response, cybercrime analysis, cyber-risk management, civil and regulatory matters, and privacy protection. Relevant research areas include forensic science, computer science, data science, artificial intelligence, and smart technology.

Types of Paper

This journal is used by investigative agencies and forensic laboratories, computer security teams, practitioners, researchers, developers, and lawyers from industry, law enforcement, government, academia, and the military to share their knowledge and experiences, including current challenges and lessons learned in the following areas:

Research and development:
Novel research and development in forensic science, computer science, data science, and artificial intelligence applied to digital evidence and multimedia. New methods to deal with challenges in digital investigations, including applied research into analysing digital evidence and multimedia, exploiting specific technologies, and into preparing for and responding to computer security incidents.

Cyber-criminal investigation:
develop new methods of online investigation and analysis of financially motivated cyber-crime such as banking Trojans, phishing, ransomware and other forms of cyber-fraud. In addition, researching future criminal activity involving peer-to-peer payments and crypto currencies.

Cyber-risk management:
Improved ways of using digital evidence to address security breaches involving information systems, methods to find zero day attacks and to perform cyber threat intelligence. The techniques and findings of digital investigations are essential in drawing post-incident conclusions, which are vital feedback components of the security policy development process, and managing risk appetite.

Case Notes:
Brief investigative case studies with practical examples of how digital evidence is being used in digital investigations, forensic analysis, and incident response. Case Notes can also describe current challenges that practitioners are facing in cybercrime and computer security, highlighting areas that require further research, development or legislation. The format for Case Notes is simple and short: case background, any technical or legal challenges, the digital evidence involved, processes and/or tools used, and outcomes (e.g., solutions, barriers, need for R and D).

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