Artificial Intelligence and Blockchain in Digital Forensics

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Description:
Digital forensics is the science of detecting evidence from digital media like a computer, smart phone, server, or network. It provides the forensic team with the most beneficial methods to solve confused digital-related cases. AI and blockchain can be applied to solve online predatory chat cases and photo forensics cases, provide network service evidence, custody of digital files in forensic medicine, and identify roots of data scavenging. The increased use of PCs and extensive use of internet access, has meant easy availability of hacking tools. Over the past two decades, improvements in the information technology landscape have made the collection, preservation, and analysis of digital evidence extremely important. The traditional tools for solving cybercrimes and preparing court cases are making investigations difficult. We can use AI and blockchain design frameworks to make the digital forensic process efficient and straightforward. AI features help determine the contents of a picture, detect spam email messages and recognize swatches of hard drives that could contain suspicious files. Blockchain-based lawful evidence management schemes can supervise the entire evidence flow of all of the court data. This book can provide a wide-ranging overview of how AI and blockchain can be used to solve problems in digital forensics using advanced tools and applications available on the market.

Keywords: AI, blockchain, digital forensics, deep learning, cryptocurrency, forensic-chain, identity management.