A logo of a university

AI-generated content may be incorrect.Cyber Forensics

Cyber forensics, also known as digital forensics, is the practice of collecting, analyzing, and preserving digital evidence from electronic devices in a way that is legally admissible in court. It plays a crucial role in investigating cybercrimes such as hacking, data breaches, identity theft, and online fraud. Cyber forensics experts use specialized tools and techniques to recover deleted files, trace unauthorized access, and identify digital footprints left by attackers. Their work helps law enforcement agencies and organizations understand how security incidents occurred and who was responsible.

In addition to criminal investigations, cyber forensics is also used in civil cases, internal corporate investigations, and cybersecurity assessments. As technology continues to evolve, so do the challenges faced by forensic analysts, such as dealing with encrypted data, cloud storage, and emerging threats like deepfakes or AI-generated content. Cyber forensics not only supports justice but also helps improve cybersecurity practices by revealing system vulnerabilities and guiding the development of more robust defenses.