

Homework 1

1. What is the importance of cyber security in the present era?

Cyber security is crucial in today's digital world because it protects sensitive data from theft and damage. With increasing cyber threats like hacking, phishing, and ransomware, organizations and individuals must safeguard their information to prevent financial losses and reputational harm.

2. How does AI help in improving cyber security?

AI enhances cyber security by detecting anomalies in network traffic, identifying malware patterns, and automating threat responses. Machine learning algorithms analyze vast amounts of data to predict and prevent attacks before they occur, making security systems more efficient.

3. Why do enterprises rely on Linux-based systems to make a secure infrastructure?

Enterprises prefer Linux-based systems due to their open-source nature, allowing for constant security updates. Linux has strong permission controls, fewer vulnerabilities compared to other OSs, and is less targeted by malware, making it ideal for secure infrastructures.