

Homework 3

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

Cyber security is vital as our reliance on digital platforms grows. It ensures privacy, protects national security, and maintains trust in online transactions. Without strong cyber defenses, critical infrastructure like banks and hospitals could be compromised.

2. How does AI help in improving cyber security?

AI revolutionizes cyber security by enabling real-time threat detection, behavioral analysis, and automated incident response. Deep learning models can identify zero-day exploits, reducing the time between attack and mitigation.

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

Linux is favored for security due to its modular design, minimal bloat, and strong community support. Enterprises benefit from customizable security patches and a lower attack surface compared to proprietary systems.