

A decorative graphic on the left side of the slide consisting of two overlapping parallelograms. The front one is blue and the back one is a light green color. They are positioned diagonally, with the blue one partially covering the green one.

Cybersecurity

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CYBER SECURITY





What Is Cybersecurity?

Cybersecurity is the set of procedures, tools, and practices used to guard against data loss or theft, cyberattacks, and unauthorized access to digital systems, networks, and data. It entails putting different safeguards in place to guarantee the privacy, availability, and integrity of digital assets. These precautions consist of intrusion detection systems, firewalls, encryption, multi-factor authentication, and frequent security audits, among others. In the linked world of today, when individuals, governments, and corporations rely significantly on digital technology for daily activities like communication and trade, cybersecurity is essential. Protecting private data, maintaining confidence, and reducing the dangers associated with cyberattacks all depend on having a strong cybersecurity plan.





Cloud Security

The set of guidelines, tools, and safeguards put in place to safeguard information, programs, and hardware in cloud computing settings is known as cloud security. Making sure that strong cloud security measures are in place is crucial since cloud services are increasingly being used for processing and storing sensitive data. Identity and access management (IAM), network security, data encryption, and regulatory compliance are important facets of cloud security. Although many security measures are provided by cloud service providers, it is crucial for businesses to be aware of their own security obligations when it comes to protecting their data and apps in the cloud. Furthermore, identifying and reducing possible threats and vulnerabilities requires maintaining visibility and control over cloud resources through ongoing security evaluations and monitoring. Organizations may take advantage of cloud computing's capacity for growth and adaptability while successfully controlling risks to their data and systems by putting strong security measures in place.

Artificial Intelligence in Cyber Security





Artificial Intelligence in Cybersecurity

By adding cutting-edge capabilities for threat detection, analysis, and reaction to conventional security measures, artificial intelligence (AI) significantly improves cybersecurity. Massive volumes of data from several sources can be instantly analyzed by AI algorithms, which can then be used to spot trends that could point to possible cyberthreats like malware infestations or questionable user activity. Machine learning models have the capacity to continuously adjust and enhance their accuracy over time, making threat detection more efficient and proactive. Furthermore, cybersecurity experts may concentrate on more strategic endeavors by using AI-powered security solutions to automate repetitive operations like patch management and security policy enforcement. Like any technology, there are drawbacks and issues to be aware of, such as the possibility of hostile assaults directed towards AI systems and the requirement for accountability and transparency in AI-driven decision-making processes. All things considered, AI has enormous potential to bolster cybersecurity defenses and assist enterprises in staying ahead of constantly changing cyberthreats.





Cybersecurity Policy and Regulation

The laws, rules, and frameworks created by governments and regulatory organizations to safeguard digital systems, networks, and data against cyber attacks are collectively referred to as cybersecurity policy and regulation. These policies specify the rules and guidelines that companies must follow to protect confidential data and guarantee the dependability of vital infrastructure. Numerous topics are covered by cybersecurity rules, such as risk management, data protection, incident response, and compliance reporting. In addition, they have the power to penalize non-compliance and mandate that businesses put in place particular security measures, like encryption, access controls, and recurring security audits. In an increasingly linked world, establishing a culture of security, building stakeholder trust, and reducing the risks associated with cyber attacks all depend on effective cybersecurity laws and regulations.



Work Cited Page

Cybersecurity Understanding: Digital Threats and Protection - Game Revolution.

<https://game-revolution.com/cybersecurity-understanding-digital-threats-and-protection/>

Cybersecurity in the cloud coming into focus with CISA configurations, CSRB review.

<https://federalnewsnetwork.com/cybersecurity/2023/08/cybersecurity-in-the-cloud-coming-into-focus-with-cisa-configurations-csrb-review/>

Altourage | Demystifying Cloud Security: Best Practices for SMBs.

<https://altourage.com/demystifying-cloud-security-best-practices-for-smb/>

Thank You!

