

Newsletter 2019 Issue II



**Bharati Vidyapeeth's
Institute of Management and Information Technology
Navi Mumbai**

**BHARATI VIDYAPEETH'S
INSTITUTE OF MANAGEMENT AND INFORMATION TECHNOLOGY
NAVI MUMBAI**



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(Deemed to be University), Pune



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BVIMIT fortifies student's intellectual awaking and social transformation in different spheres that makes them to contribute to the organization and world as well. We strengthen student's hard work and commitments towards knowledge.

BVIMIT provides MCA, VI semester course enables overall development of students and give a different perspective towards corporate life.

Current newsletter entitled "***PRABHAT-exploring tech rising star***" is a combined effort of students and staff members that commences articles on emerging technologies with theme as "**CYBER SECURITY**" provides articles for the same.

I hope "**PRABHAT**" will take you to the world of prominent technologies.

Editorial Desk



Prof. Pratibha Deshmukh
Editor-in-chief

It is indeed a great honor to be the Newsletter Editor for me and also an immense pleasure to launch the first edition of BVIMIT Newsletter “PRABHAT- exploring tech rising star”.

As we are living in the technological era, we have selected the topic for the article as “**CYBER SECURITY**” to make students aware about this emerging technology. It aims to be a truly interdisciplinary platform seeking to bring together a range of diverse voices on the topic in order to stimulate discussion.

A huge thank you to all the students who contributed writing the articles, without which there wouldn't have been this newsletter.

I appreciate PRABHAT student members for their everlasting support throughout the creation of this edition.

I hope “**PRABHAT**” will convey some technical knowledge to you.



ASHWINI D PAUNIKAR

STUDENT MCA

PRACTICES ON CYBER SECURITY

Cyber Security refers to the body of technologies, processes, and practices designed to protect networks, devices, programs, and data from attack, damage, or unauthorized access. Cyber security may also be referred to as information technology security.

Cyber Security comprises of following challenges:-

- Network Security
- Application Security
- Data Security
- Database and Infrastructure Security
- Cloud Security

Network Security

Network security consists of the practices adopted to prevent and monitor unauthorized access, misuse, modification, or denial of a computer network and network-accessible resources. Network security involves the authorization of access to data in a network, which is controlled by the network administrator. Networks can be private, such as within a company, and others which might be open to public access. Network security is involved in organizations, enterprises, and other types of institutions.



Application Security

Application security is the process of making apps more secure by finding, fixing, and enhancing the security of apps. Application security provides various securities to web applications like session and cookies to be stored in client browser. It takes measures to protect application from external networks. Application security is getting a lot of attention. Hundreds of tools are

available to secure various elements of your applications, from locking down coding changes to assessing coding threats.

Data Security

Data Security refers to the process of protecting data from unauthorized access and data corruption throughout its lifecycle. Data Security includes data encryption and key management practices that protect data across all applications and platforms. Data security means protecting digital data, such as those in a database, from the unwanted actions of unauthorized users, such as a cyber-attack. For individuals, data security can take the form of precautions like backing up your devices on a regular basis and creating passwords that are long and complex, there are many parts to a comprehensive data-security solution. What follows here is not meant to be a step-by-step breakdown of everything you need to do to create perfect data security.

Database and Infrastructure Security

Database security refers to the collective measures used to protect and secure a database or database management software from illegitimate use and malicious threats and attacks. It is a broad term that includes a multitude of processes, tools and methods that ensure security within a database environment. It usually consist of access control, manages the resources availability to the authorized users and Inference control that protect the sensitive data and metadata from unauthorized users.

Cloud Security

Cloud security is the protection of data stored online from theft, leakage, and deletion. Methods of providing cloud security include firewalls, penetration testing, virtual private networks (VPN), and avoiding public internet connections. Major threats to cloud security include data breaches, data loss, account hijacking, service traffic hijacking, insecure application program interfaces (APIs), poor choice of cloud storage providers, and shared technology that can compromise cloud security. Distributed denial of service (DDoS) attacks are another threat to cloud security. These attacks shut down a service by crashing it with data so that users cannot access their accounts, such as bank accounts or email accounts.

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