

infoX

JUNE 2022

EMERGING TRENDS OF IT AND BUSINESS

TOOL OF THE MONTH

CYBERSECURITY

BLOCKCHAIN

GAME

UNBOXING HARDWARE



**JAIPURIA INSTITUTE
OF MANAGEMENT**

EMPOWER • ENTHUSE • EXCEL

The IT Club Magazine is all about phenomenal innovations happening everyday around us.

Editor's Note



The current issue is a proliferation of emerging, path breaking technologies in IT Sector. While highlighting the emergence of Bit.Ai being one of the prominent tools to create documents in groups, it throws light on this cloud-based software that works perfectly for content writers and bloggers. Moreover, blockchain is one of the most recently established technologies, highlighting concepts and advancements of the Internet of Things (IOT) and Artificial Intelligence (AI) revolutions. It enables users to validate, and synchronize the contents of a replicated transaction ledger. Cybersecurity is another technique that is used to secure key systems and sensitive data from digital threats. Disney Mirrorverse is a crossover mobile role-playing game developed by Kabam adding to the recent developments in IT sector. Last but not the least addition in this issue is Apple - Mac Studio and Studio Display, an entirely new on Mac desktop and display designed. It is a pack of outrageous performance and extensive connectivity.

Altogether, these innovations are new changes and changes should be welcomed.

HARSHIT TIWARI
MBA[(BA) 2021-23]

Tool of the Month

BIT.AI

Bit.AI is one of the most prominent tools for individuals and teams to create documents in groups. It is cloud-based software to manage documents, and projects, communicate meeting agendas, form proposals, etc. Overall, it is software that works perfectly for content writers and bloggers.

BIT.AI Features:

- The users can create an unlimited number of workspaces for personal or professional spaces, teams, departments, cross-functional teams, and clients.
- The users get the privilege of searching the workspaces, contents, and documents inside the documents. You can even search the content library with keywords, titles, etc.
- Creating footnotes, superscripts, and emojis for the script is effortless via Bit.AI.
- Get real-time insights into your documents and see how the users interact with your content.
- Customize the workspaces according to your team and department. You can even set a unique name, description, tags, etc.
- Bit.AI secures the confidentiality of customers' content and rest with TLS and AES 256 encryption.
- Bit.AI offers 3 kinds of pricing plans: Free, Pro & Business Plan.

Bit.ai has end-to-end knowledge management & document collaboration features to help teams collaborate on their work, weaving in every type of digital content, and share knowledge intelligently.



CYBERSECURITY USING AI



CYBERSECURITY (a.k.a. Information Technology (IT) security) is a technique that is used to secure key systems and sensitive data from digital threats.

The presence of CYBERSECURITY concerns has engendered the use of Internet of Things (IoT). Artificial Intelligence (AI) is at the forefront of CYBERSECURITY, and it is used to create complex algorithms to protect networks and systems. Cyber-attackers have figured out how to exploit AI and have started using adversarial AI to carry out CYBERSECURITY attacks. In 2020, the average global cost of data breach was USD 3.86 million, and USD 8.64 million in the United States. Moreover, a study conducted in 2021 reported that the average total cost of data breach in INDIA was 165 million, a 17.85 percent increase from 2020.

In the Indian context, the top three industries in terms of security breach cost records are FINANCIAL (₹ 5536), EDUCATION (₹ 3139), and PUBLIC SECTOR (₹ 2100).

Many CYBERSECURITY specialists are adopting Artificial Intelligence (AI) tools to dynamically safeguard systems from cyber assaults. In CYBERSECURITY, AI is used for intrusion detection by monitoring traffic patterns and looking for an activity that hints at the possibility of an attack.

TYPES OF AI USED IN CYBER SECURITY

- Decision Trees
- K- nearest neighbors
- Support vector machines
- Artificial neural networks

AI is well suited to solve complex problems, and CYBERSECURITY is undoubtedly one of them. Machine learning and AI can be used to "keep up with the bad guys," automating threat detection and responding more efficiently than traditional software-driven approaches in today's ever-changing cyber-attacks and proliferation of devices.

EARLY AI ADOPTERS FOR CYBERSECURITY

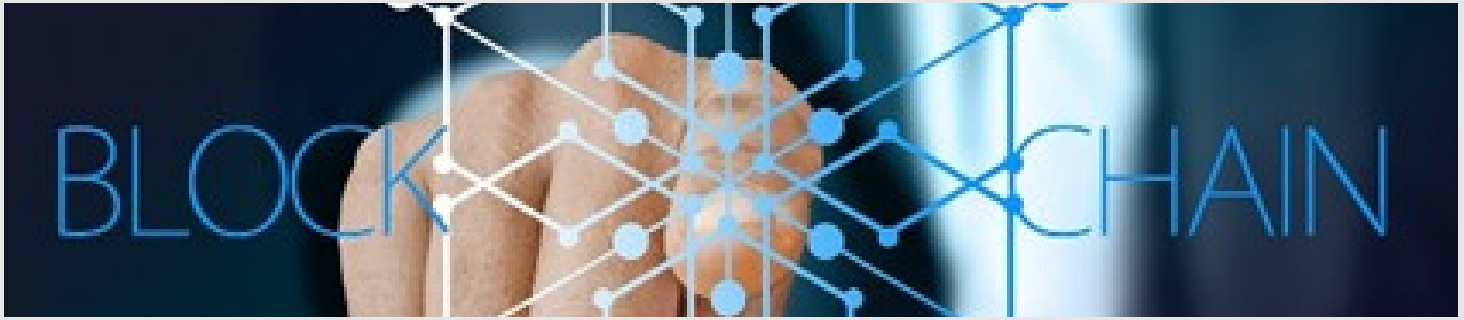
- Google (Gmail)
- IBM
- Juniper Networks

AI provides vital analysis and threat identification, which CYBERSECURITY professionals can use to reduce breach risk and improve security issues. AI in security can identify and prioritize risk, detect malware on a network instantly, guide incident response, and detect intrusions before they occur.

But the question is, isn't there any survivor? The answer is ethical hacking. Duplicating the techniques and behaviours of malicious attackers is part of carrying out an ethical hack. This approach aids in the detection of security vulnerabilities, which can subsequently be addressed before a malevolent attacker can exploit them.

Source:

<https://www.ibm.com/in-/security/data-breach>



BLOCKCHAIN= “BLOCK” + “CHAIN”

BLOCKCHAIN is an amalgamation of two terms block and chain. Where each block contains information and connects with other blocks to form a chain.

BLOCKCHAIN is a system that enables users to validate, maintain, and synchronize the contents of a replicated transaction ledger.

A BLOCKCHAIN is a digital ledger of data records that is constantly increasing. These data records are structured chronologically and linked and secured by cryptographic proofs.

To put it another way, BLOCKCHAIN is a decentralized transaction and data management platform that eliminates the need for third-party data controllers and enhances participant's confidence. This attribute is achieved through an internal system in which transactions are time-stamped in a ledger; as a result, data cannot be edited or amended without the consent and updating of the ledger. While conducting transactions, this technology assures security and confidence.

In sum, it can be said that when it comes to BLOCKCHAIN technology, the two most important characteristics to look for are:



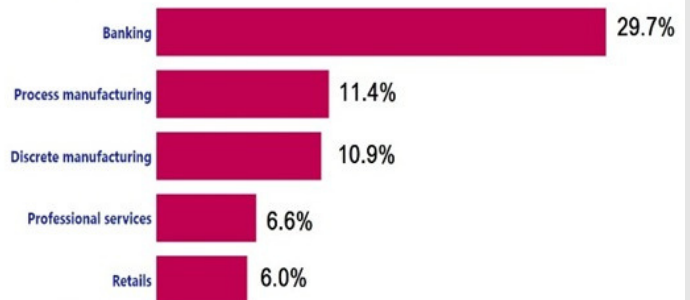
DECENTRALIZATION



TRUST

Many sectors show potential for BLOCKCHAIN applications, due to the growing interest in BLOCKCHAIN and its execution in numerous sectors and industries. Many educational and medical applications, as well as financial, corporate, industrial, and voting applications use BLOCKCHAIN technology in recent times.

Top BLOCKCHAIN Spendors Worldwide
(By Industry)



Source: IDC 2020

BLOCKCHAIN is one of the most recently established technologies, highlighting concepts and advancements of the Internet of Things (IoT) and Artificial Intelligence (AI) revolutions.

Ethereum • Created By: Vitalik Buterin • Inception Year: 2015 • Ledger Type: Public • Cryptocurrency: Ether • TPS: 15/sec • Consensus Mechanism: PoW	Solana • Created By: Anatoly Yakovenko • Inception Year: 2017 • Ledger Type: Public • Cryptocurrency: SOL • TPS: 2000/sec • Consensus Mechanism: PoS & Proof of History	Hyperledger • Created By: Linux Foundation • Inception Year: 2016 • Ledger Type: Private • Cryptocurrency: NA • TPS: 1000/sec • Consensus Mechanism: NA	Polygon • Created By: Jayesh Kataria, Sandeep Nair, and Mihailo Bjelic • Inception Year: 2017 • Ledger Type: Public • Cryptocurrency: MATIC • TPS: 6500/sec • Consensus Mechanism: PoS & Plasma-based Sidechain	TRON • Created By: Justin Sun • Inception Year: 2017 • Ledger Type: Public • Cryptocurrency: Tron (TRX) • TPS: 2000/sec • Consensus Mechanism: DPoS	Flow • Created By: Dapper Labs • Inception Year: 2019 • Ledger Type: Public & Private • Cryptocurrency: FLOW • TPS: 1000/sec • Consensus Mechanism: PoS	Polkadot • Created By: Gavin Wood • Inception Year: 2016 • Ledger Type: Public & Private • Cryptocurrency: DOT • TPS: 65,000/sec • Consensus Mechanism: Hybrid - NPoS



Disney Mirrorverse

Disney Mirrorverse is crossover mobile role-playing game developed by Kabam. Enhanced versions of Disney and Pixar characters are featured in the game, which blends RPG gameplay with combat and fighting gameplay.

Has a team of powerful guardians, players will assemble an all-new, visually stunning adventure that has been designed specifically for the Mirrorverse.

In this alternate reality, an evil threat is threatening to take over, and players will have to prepare for battle, face down an evil threat, and defend the Mirrorverse.

You can download the file by these links.

For IOS:
<https://apps.apple.com/in/app/disney-mirrorverse/id1453908358>

For Android:
<https://play.google.com/store/apps/details?id=com.kabam.bullseye>

UNBOXING HARDWARE

Apple introduced Mac Studio and Studio Display, an entirely new on Mac desktop and display designed, it give users everything that they need to build the studio of their dreams. It is a packs of outrageous performance and extensive connectivity. Mac Studio is powered by M1 Max and the new M1 Ultra, the world's most powerful chip for a personal computer. It is the first computer to deliver an unique level of performance an broad array of connectivity, With Mac Studio, users can do things that are not possible on any other desktop, such as rendering massive 3D environments and playing back 18 streams of ProRes video.

Mac Studio and Studio Display transform any workspace into a creative powerhouse. They join Apple's strongest, most powerful Mac lineup ever.

M1 MAX

M1 Max brings power to tackle challenges of, almost any size. Whether you're running multiple apps, sorting and editing thousands of photos, recording and mixing professional-quality music, or discovering a new exoplanet, the screaming-fast M1 Max has your back.

**Up to
2.5x
Faster CPU
Performance**

**Up to
2.2x
Faster machine learning**

**Up to
3.4X
Faster GPU
performance**

MAC STUDIO

The Mac studio is the newest Mac in Apple's lineup and in early in its product cycle. Since it is an entirely new Mac product line and there have been no previous models, we have no indication of how long Apple usually waits to update it. While the Mac Studio is now Apple's most powerful Mac, for an Intel-based desktop machine with an interchangeable, modular design with more ports, there is the Mac studio is out of your price range but you still want a similar Apple silicon-based desktop Mac, there is the entry-level Mac mini, which start at just \$699.

Apple says the mac studio is meant to provide "outrageous performance, extensive connectivity, and new capabilities" in a super compact retransforming any space into "studio".



M1 Ultra

Built from two M1 Max chips, M1 Ultra lets you power through workflows on an unprecedented scale. So, you can run complex particle simulations or work with massive 3D environments that were previously impossible to render. And with twice the media engine resources, M1 Ultra can support up to streams of 8k ProRes 422 video playback- something no other personal computer can do.

**Up to
3.8x
Faster CPU
performance**

**Up to
3.0x
Faster machine learning**

**Up to
4.5x
Faster GPU
performance**

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