# BYTE QUEST

## Vasavi College Of Engineering

## Department of Computer Science and Engineering

November 13, 2020
VOLUME 89

Contents:



Byte Quest is the article published by the CSE department of Vasavi College of Engineering regarding the latest innovative technologies and software that have been emerged in the competitive world. The motto of this article is to update the people regarding the improvement in technology. The article is designed by the active participation of students under the guidance of faculty coordinators.

Good, bad or indifferent if you are not investing in new technology, you are going to be left behind.

-Philip Green

Once a new technology rolls over you, if you're not part of the steamroller, you're part of the road.

-Stewart Brand


FACULTY COORDINATORS

S. KOMAL KAUR (ASST. PROFESSOR)

C.GIREESH (ASST. PROFESSOR)

STUDENT COORDINATORS

D. APARNA (4/4 CSE-B)

CAROL (4/4 CSE-A)

K. ANISHA (3/4 CSE-B)

R. ABHINAV (3/4 CSE-A)

AKASH VORA (2/4 CSE-C)

IMRAN MIRZA (2/4 CSE-A)

NISCHALA (2/4 CSE-B)

## ETHEREUM

Ethereum is a global, decentralized platform for money and new kinds of applications. Like Bitcoin, Ethereum is a distributed public block chain. An absolute majority of online services, businesses, enterprises are built on a centralized system of governance. This approach is flawed as centralized approach means single entity control which is extremely vulnerable to hacker attacks. Ethereum, being a decentralized system, is fully autonomous. It has no central point of failure.

Ethereum took a technology behind bitcoin and substantially expanded its capabilities. It is a whole network, with its own internet browser, coding language and payment system.


It enables users to create decentralized applications on Ethereum blockchain. Ethereum proposed to utilize blockchain technology not only for maintaining a decentralized payment network but also for storing computer code which can be used to power tamper proof decentralized financial contracts and applications. Ether is like the fuel for running commands on Ethereum platform.

**V Venkateswarlu Gupta(CSE-B 2/4)**

## ALL ABOUT BLOCK CHAIN

Have you ever wondered how nations ensure greater transparency in election voting and reducing the number of voter frauds? This is possible with BLOCKCHAIN TECHNOLOGY which is revolutionizing every day. In simple words, it provides a way to securely and efficiently create a tamper-proof log of sensitive activities.

To store a block of info in a block – chain: A transaction should take place and should be verified, stored in the block. The block of transaction should get a unique identification code called as HASH generated by nonce. These blocks are then secured together using cryptographic principles that are called chains.

The data in the block is signed and forever tied to the nonce and hash.

Miners create new blocks(mining) and use special software to solve the incredibly complex math problem of guessing nonce that generates the accepted hash (nonce is 32 bits and hash is 256 so there are roughly 4 billion hash –nonce combinations before right one). If miners find the right combination then that is added to chain and accepted by all the nodes on the network. Data manipulation is very difficult in block chain.

**S KAVYASREE (CSE-B 2/4)**

# TECH TRENDS IN A POST COVID-19 WORLD

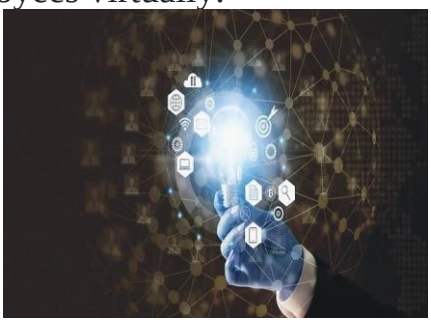
COVID19 pandemic in a way is being viewed as a catalyst for digital transformation and will greatly accelerate several major trends that were already well underway before the pandemic even began. The COVID-19 pandemic will have a lasting effect not only on our economy, but on how we go about our daily lives as well. While this pandemic has forced many businesses to reduce or suspend operations, affecting their bottom line, it has helped to accelerate the development of several emerging technologies which would otherwise take time to emerge This is especially true for innovations that reduce human-to-human contact, automate processes, and increase productivity amid social distancing.

- **Artificial Intelligence**

The term Artificial Intelligence (AI) is not all that new for the information technology sphere, and it's still increasing its impact. Post-COVID-19, consumer behaviors won't go back to pre-pandemic norms. As companies begin to navigate the post-COVID-19 world as economies slowly begin to reopen, the application of artificial intelligence (AI) will be extremely valuable. AI will be particularly useful for those within retail and supply chain industries. With the help of machine learning and AI companies can detect new purchasing patterns and deliver a greater personalized experience to online customers. Chatbots provide clients' support 24/7, one of the most widely used during lockdown by customers.

- **Augmented/Virtual Reality**

The influence of virtual and augmented reality will grow in training and simulation, as well as offering new ways to interact with customers. This pandemic increased the number of people using VR headsets to play video games, explore virtual travel destinations and partake in online entertainment. .Businesses have also been experimenting with VR platforms to train employees, hold conferences, collaborate on projects, and connect employees virtually.



- **IoT**

Internet of Things (IoT) devices enable internet connection beyond computers and smartphones with the possibility of remotely controlling things. IoT will enable us to predict and treat health issues in people even before any symptoms appear, with smart medication containers. IoT will transform the user experience profoundly, providing opportunities that weren't possible before. Gaining this experience may be forced by the pandemic.

After the COVID-19 outbreak, it is evident that technological innovations are helping to manage the pandemic and provide necessary tools to fight for future public health emergency in a timely, systematic, and calm manner.

**SADIA FIRDOUS (CSE-B 2/4)**