"Metaverse Technology"

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Abstract :- In futurism and science fiction, the metaverse is a hypothetical iteration of the Internet as a single, universal and immersive virtual world that is facilitated by the use of virtual reality (VR) and augmented reality (AR) headsets. In colloquial use, a metaverse is a network of 3D virtual worlds focused on social connection. The term "metaverse" originated in the 1992 science fiction novel Snow Crash, as a portmanteau of "meta" and "universe". Metaverse development is often linked to advancing virtual reality technology due to increasing demands for immersion. Recent interest in metaverse development is influenced by Web3, a concept for a decentralized iteration of the internet. Web3 and The Metaverse have been used as buzzwords to exaggerate development progress of various related technologies and projects for public relations purposes. Information privacy, user addiction, and user safety are concerns within the metaverse, stemming from challenges facing the social media and video game industries as a whole.

The Metaverse is the post-reality universe, a perpetual and persistent multiuser environ- ment merging physical reality with digital virtuality. It is based on the convergence of technologies that enable multisensory interactions with virtual environments, digital objects and people such as virtual reality (VR) and augmented reality (AR). Hence, the Metaverse is an interconnected web of social, networked immersive environments in persistent multiuser platforms. It enables seamless embodied user communication in real-time and dynamic interactions with digital artifacts. Its first iteration was a web of virtual worlds where avatars were able to teleport among them. The contem- porary iteration of the Metaverse features social, immersive VR platforms compatible with massive multiplayer online video games, open game worlds and AR collaborative spaces.

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"LI-FI AND MI-FI"

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Abstract :- Whether you're using wireless internet in a coffee shop, stealing it from the guy next door, or competing for bandwidth at a conference, you've probably gotten frustrated at the slow speeds you face when more than one device is tapped into the network. As more and more people and their many devices access wireless internet, clogged airwaves are going to make it increasingly difficult to latch onto a reliable signal. But radio waves are just one part of the spectrum that can carry our data. What if we could use other waves to surf the internet? One German physicist,DR. Harald Haas, has come up with a solution he calls "Data Through Illumination"—taking the fiber out of fiber optics by sending data through an LED light bulb that varies in intensity faster than the human eye can follow. It's the same idea behind infrared remote controls, but far more powerful. Haas says his invention, which he calls D-Light, can produce data rates faster than 10 megabits per second, which is speedier than your average broadband connection. He envisions a future where data for laptops, smartphones, and tablets is transmitted through the light in a room. And security would be a snap—if you can't see the light, you can't access the data. Li-Fi is a VLC, visible light communication, technology developed by a team of scientists including Dr Gordon Povey, Prof. Harald Haas and Dr Mostafa Afgani at the University of Edinburgh. The term Li-Fi was coined by Prof. Haas when he amazed people by streaming high definition video from a standard LED lamp, at TED Global in July 2011. Li-Fi is now part of the Visible Light Communications (VLC) PAN IEEE 802.15.7 standard. "Li-Fi is typically implemented using white LED light bulbs. These devices are normally used for illumination by applying a constant current through the LED. However, by fast and subtle variations of the current, the optical output can be made to vary at extremely high speeds. Unseen by the human eye, this variation is used to carry high-speed data," says Dr Povey, , Product Manager of the University of Edinburgh's Li-Fi Program 'D-Light Project'.

"Tools use for Reconnaissance in Ethical Hacking"

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Abstract :- Reconnaissance is the first step of Hacking Methodology. Reconnaisance, also known as information gathering, is classified as active and passive reconnaissance. Active reconnaissance includes interacting directly with the target. It is important to note that during this process, the target may record IP address and log activity. Passive reconnaissance makes use of the vast amount of information available on the web. Reconnaissance tools, as should be clear from the name, are those that we use to gather information, usually in a passive state, about the networks and systems that we might plan to take action against in a logical sense. Such efforts may include gathering information from public websites, looking up Domain Name System (DNS) server records, collecting metadata from accessible documents, retrieving very specific information through the use of search engine, or any of a number of other similar activities. For reconnaissance, we may use information gathered from sources such as:
 • Website Footprinting • Whois Footprinting • Nslookup • Dig • Whatweb • Shodan • Nmap • Email Footprinting

"Edge Computing"

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Abstract :- With Digital Transformation and emerging technologies that will enable "smart" everything - cities, agriculture, cars, health, etc - in the future require the massive deployment of Internet of Things (IoT) sensors while edge computing will drive the implementations. The proliferation of Internet of Things (IoT) and the success of rich cloud services have pushed the horizon of a new computing paradigm, edge computing, which calls for processing the data at the edge of the network. Edge computing has the potential to address the concerns of response time requirement, battery life constraint, bandwidth cost saving, as well as data safety and privacy. In this paper, we introduce the definition of edge computing, followed by several case studies, ranging from cloud offloading to smart home and city, as well as collaborative edge to materialize the concept of edge computing. Finally, we present several challenges and opportunities in the field of edge computing.

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"Salesforce"

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Abstract :- The cloud computing service that specially looks into Customer Relationship Management is called Salesforce. The cloud platform used in salesforce technology is Software as a Service(Saas). This helps in connecting with existing and future customers and partners in business. The relationship with the customers can be maintained well with this technology, and new customers can be created. Also, existing customers remain loyal due to the easiness of business. The platform integrates all the domains such as marketing, sales, customer service, supply chain, data analysis, and many others so that customers can have an integrated view of the business.

Salesforce has been designed with the help of technology that is based on the concepts of social networks. It allows you to create a user-friendly environment for your business. The core purpose of the Salesforce platform is to make business processes more effective. It gives you a complete control over all the activities which take place within your business. You can easily access all the data from anywhere and anytime. The platform also allows you to automate various processes and workflows which will improve your productivity and efficiency.

Salesforce is an enterprise resource planning (ERP) software that integrates multiple applications and helps in streamlining business processes. It provides you with various tools to maintain customer relationship, increase sales and marketing effectiveness and enhance customer service. If you want to know more about the features and benefits of Salesforce, then you can read this blog post.

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"AWES: Adaptive web exploration system"

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Abstract :- Internet users in the current digital age are increasingly using world wide web not only for entertainment but also for accessing information related to different topics. Our system aims at developing a web based environment that brings most of the information required by a user at one place. When a user searches a topic on the web, a lot of results are shown to the user which may or may not be relevant to the user. In our system, a user will be able to create shared bookmarks and save the links which would be relevant, so the user can access those links later also. Moreover when a user will search for a topic, the results shown to the user will be intelligently selected from the results that are searched by different users. This system will use concept of multiperspective thinking as well as implementation of intelligent user behavior for showing relevant links for a topic

"Datafication"

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Abstract :- Datafication is also taking a previously invisible process/activity and turning it into data that can be monitored, tracked, analyzed and optimized. The Latest technologies we use have enabled lots of new ways of 'identifying' our daily and basic activities. Datafication is not just the making of information, which, in
one sense, human beings have been doing since the creation of symbols and writing. Rather, datafication is a contemporary phenomenon which refers to the quantification of human life through digital information, very often for economic value. This process has major social consequences. Disciplines such as political economy, critical data studies, software studies, legal theory, and more recently decolonial theory, have considered different aspects of those consequences to be important. Fundamental to all such approaches is the analysis of the intersection of power and knowledge. The benefits of Datafication is to Improve Efficiency, Manage Information, Facilitate Digital Transformation.

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"Cryptocurrency"

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Abstract :- Cryptocurrency is a form of digital or virtual currency designed to work as a medium of exchange. These have emmerged as an important nancial software system. These cryptocurrencies are generated by a process called mining. Mining is an integral process that not only creates the currency but also, adds records of past transactions to the distributed ledger (collection of transactions) known as blockchain. The use of blockchain and cryptography, enables security in the environment and makes it robust in nature. Cryptocurrencies are designed using a peer-topeer system, so they are not centrally owned by anyone, like the regular currencies. For the mining of such digital currencies, we have to rely on miners to validate the currency and its creation. To provide the security to the currency, it uses crytography to secure and verify transactions as well as to control the creation of new units of a particular cryptocurrency. Cryptocurrencies are limited entries in a database that no one can add activity to unless specific conditions are fullfilled. There are almost more than 1600 cryptocurrencies in the market right now, and many more are created daily. Bitcoin, Ethereum, Tether, Binance coin, are some of the top ranked cryptocurrencies.

"Internet of Nano Things : Security Issues and Applications."

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Abstract :- Nanotechnology provides new solutions for numerous applications that have a significant effect on almost every aspect of our community including health monitoring, smart cities, military, agriculture, and industry. The interconnection of nanoscale devices with existing communication networks over the Internet defines a novel networking paradigm called the Internet of Nano-Things (IoNT). The IoNT involves a large number of nan sensors that used to provide more precise and detailed information about a particular object to enable a better understanding of object behavior. We investigate the challenges and opportunities of the IoNT system in various applications. An overview of the IoNT is first introduced. This is followed by a discussion of the network architecture of the IoNT and various applications that benefit from integrating IoT with nanotechnology. In the end, since security is considered to be one of the main issues of the IoNT system, we provide an in-depth discussion on security goals, attack vectors and security challenges of the IoNT system.

"E-ball Technology"

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Abstract :- **E-ball technology** is a tiny computer in the shape of a sphere. It is one of the smallest designs that have been made for laptops and desktops. A new computer is designed by Apostol Tnokovski recently which has all characteristics of existing computer and This is named as 'E-ball'.

The E-ball computer is the latest concept. It is a very smallest PC in the world. It is in sphere shaped, so it has the smallest design compare to all laptops and desktops. This computer is the traditional computer which has the some components such as laser keyboard wireless optical mouse, modem, webcam, projector and paper holder.

It is designed in specific way that it can be placed on two stands. It is opened by pressing and holding two buttons which are located at each side of E-Ball computer at the same instant. It has some features such as processor RAM, LAN and WAN card, speaker, hard disk drive. Very special and unique thing in it is that when it is closed then any one cannot able to guess that this ball contains all functionality of computer within it.

It is possible that this new entity having different way of using it can change the life of people completely in upcoming days. a Historical overview of E-ball Technology is presented,Elements, Features,working ,Application,and advantage,Disadvantge of E-ball Technology is mention.An insightful study of E-Ball Technology is done.

"Green computing"

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Abstract :- A green computer or green IT system is one where the entire process fro design, manufacture, use, and disposal involves as little environmental impact as possible. In other words, a green initiative is taken in consideration of all facets of a computer's life, from design to disposal. In the design aspect, a green computer is created to perform without a negative environmental impact. Such design includes everything from materials and components to how the computer uses its power supply. Nowadays, most computers are built with a sleep or hibernate mode that allows them to power down when not in use and, therefore, save on energy impact. A green computer will also take into account how it impacts the environment during its life. One way to make a green computer reduce its usage impact is to extend its longevity. The longer the computer lasts, the less impact it will have on the example, building a new computer from scratch produces a greater environmental effect than building a new RAM module for replacement in computing equipment. computer virtualization is helping to make large strides in green computing technology. Through the phenomenon of virtualization, it is now possible to operate two or more computers on the physical hardware of a single computer. In this manner, you could create the ultimate green computer; one that exists logically, but not physically. The logical units use all the material components of the physical computer, but are devoid of physical structure themselves. This means that the environmental impact of logical computers is virtually eliminated. The ideal green computer, therefore, may lie in virtual green computing.

"Internet Of Things In Agriculture"

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Abstract :- IoT is a revolutionary technology that represents the future of communication & computing. These days IoT is used in every field like smart homes, smart traffic control smart cities etc. The area of implementation of IoT is vast and can be implemented in every field. This paper is about the implementation of IoT in Agriculture. IoT helps in better crop management, better resource management, cost efficient agriculture, improved quality and quantity, crop monitoring and field monitoring etc. can be done. The IoT sensors used in proposed model are air temperature sensor, soil pH sensor, soil moisture sensor, humidity sensor, water volume sensor etc. In this paper I surveyed typical agriculture methods used by farmers these days and what are the problems they face, I visited poly houses for further more information about new technologies in farming. The proposed model is a simple architecture of IoT sensors that collect information and send it over the Wi-Fi network to the server, there server can take actions depending on the information.