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AI BASED COMPUTING APPLICATIONS: FUTURE COMMUNICATIONS WITH WEB 3.0

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Abstract : On considering the services of the last two decades, the current advancements of Web 2.0 on the World Wide Web have their own drawbacks. Due to widespread concerns about privacy and security, we are gradually entering a new digital era called Web 3.0. Semantic Web applications seek to achieve higher levels of security and
Interoperability by building a decentralized infrastructure, eliminating the need for central servers. Instead, Web 3.0 applications will run on distributed block chain and cloud networks and Artificial intelligence is becoming one of the deep building blocks of Web 3.0, promising to improve user experience through better content recommendations and improved human-computer interaction.

IndexTerms *- Artificial intelligence, web 3.0, Decentralized, semantic web, block chain technology.*

I. INTRODUCTION

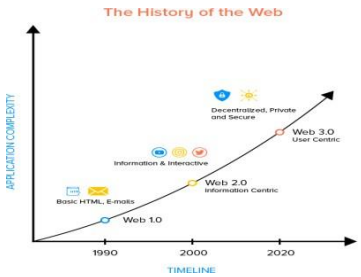
Web 3.0 is the third-generation network of this internet world, which includes a series of disruptive technologies such as block chain, augmented reality, virtual reality, and cloud edge, internet of things, geolocation technology and 5G, operating on data analysis based on artificial data. Intelligence layer - Driven view. The underlying block chain technology enables trust through mathematical proofs and smart contracts submitting to the centralized control of big tech giants. Web 1.0 introduced a new platform for numerical coefficients, Web 2.0 gave us user-oriented feedback, and Web 3.0 represented a new stage in the development of the Internet (i.e., Internet). Dynamics of visual and mental networks. It helps create networks with minimal management requirements and helps drive the new Internet economy as groups or individuals, rather than networks.

II. OBJECTIVES

The objective of Web 3.0 is to create an intelligent, autonomous, connected and open Internet. Tim Berners Lee calls Web 3.0 the Semantic Web (Semantic Web technologies that allow users to create data sources on the Web, create vocabularies, and write rules for processing data).

III. History of World Wide Web evolution from 1.0 to 3.0

The World Wide Web is the main tool that billions of people use to share information, read, write and communicate with each other on the Internet. The World Wide Web has come a long way since its inception, and in this article, I will briefly describe how the web has evolved from 1.0 to Web 2.0 to Web 3.0.[Figure 0.1] here represents a spectacular view of the generation of the web and its evolution.



[Fig 0.1] history of web Source: internet

3.1 WEB 1.0

Web 1.0 was about *retrieving and reading information. Web 2.0 is about reading, writing, creating, and interacting with end users. Thisis called a participatory social network. The Web 1.0 era spanned from 1991 to 2004.*

3.2WEB2.0

The term Web 2.0, coined by Darcy DeNucci in 1999, became the first Web 2.0 conference (later known as the Web 2.0 Summit) organized by Tim O'Reilly and Dale Dougherty. network 2.0 refers to World Wide Web sites that emphasize user-generated content, end- user usability and interoperability. Web 2.0 is also known as participatory social networking. Web 2.0 is an improved version of Web 1.0.

3.3 Web3.0

It refers to changes in network usage and interaction, including network changes to databases, integration with DLT (distributed ledger technology block chain is an example), data can help to formulate smart contracts based on the needs of individuals. This upgraded the web backend after a long period of frontend focus (web 2.0 was mostly AJAX, markup and other frontend UX innovations). Web 3.0 is a term used to describe the many evolutions in web usage and the interactions between different paths. In this case, the data is not owned but shared, however, the services show different views of the same network/data. The Semantic Web (3.0) promises to build "the world's information" in a more streamlined way than Google's existing engine solutions. This is especially true from the perspective of machine concepts rather than human understanding. The Semantic Web requires declarative ontology languages such as OWL to generate domain-specific ontologism that machines can use to reason about information and draw new conclusions beyond simple keyword matching.

IV. KEY FEATURES THAT HELP US DEFINE WEB 3.0:

4.1 Semantic Web: The next evolution of the Web involves the Semantic Web. The Semantic Web enhances on-demand web technologiesto create, share and connect content through search and analysis based on the ability to understand the meaning of words rather than keywords numbers.

4.2 Artificial Intelligence: By combining this capability with natural language processing, in Web 3.0 computers can discern information like humans, delivering faster and more relevant results. They are getting smarter to meet user requirements. Systematic risk is the only independent variable for the CAPM and inflation, interest rate, oil prices and exchange rate are the independent variables for APT model.

4.3 3D graphics: Three-dimensional design is widely used in Web 3.0 for websites and services. Museum guides, computer games, e-commerce, geospatial environments, etc. Both are examples using 3D graphics.

4.4 Connectivity*:* With Web 3.0, information is more connected through semantic metadata. As a result, the user experience is evolving totake advantage of different levels of connectivity for all available information.

4.5 Anywhere: Content is accessible through multiple apps, every device is connected to the web, and services are available everywhere.

4.6 DLT and Smart Contracts: With the help of DLT, we can have an almost impossible to hack database from which people can derive value from content and things they can own virtually, a way to achieve a trustless society by integrating intelligence. The technology doesnot require an

Web 1.0	Web 2.0	We 3.0
Mostly read-only	Widely read and write	Portable and personnel
Company focus	Community focus	Individual focus
Owning content	Sharing content	Consolidating content
Web form	Web application	Smart application
directories	Tagging	User behavior

[fig-0.2] Difference between webs.

4.7 Role of Ai in web 3.0

Artificial Intelligence (AI) is a hot topic in the web3 community. While many believe that AI will play an important role in the future of the internet, others are still trying to figure out what AI can do for the web3. AI will help create more user-friendly interfaces for web applications. Others believe that artificial intelligence can help decide what content should be displayed on intermediary as a guarantor for the contract to occur for any reason, it is based on the data of this DLT. It's a powerful tool to make the world a better place and create more opportunities for everyone on the internet. [Figure 0.2] here represents a spectacular view of the web differences. the website. Still others think AI could be used to help improve search engine results. So far there have been a few examples of how AI is used in web3.0. For example, the Suggested website uses AI to recommend new content to users based on their interests. Another example is the use of artificial intelligence by the search engine Research, which aims to provide better search results by taking into account the user's personal preferences and history. As more people start experimenting with AI on the Web3, we're likely to see more innovative uses of this technology. So far, artificial intelligence has the potential to dramatically improve the way we interact with the internet.

V. Benefits of Using Artificial Intelligence in Web3 Artificial intelligence.

AI has many advantages in Web3 applications. Here are some of those benefits:

5.1 Increased Accuracy and Efficiency: AI can help improve the accuracy and efficiency of Web3 applications by automating tasks that would otherwise require manual execution. This helps reduce errors and improves the overall quality of the application.

5.2 Improved Usability: AI can also help improve the usability of Web3 applications by providing users with more relevant and personalized results. This can make it easier for users to find what they're looking for, making the app more user-friendly.

5.3 Enhanced Security: Security is essential for all web applications. By integrating AI into Web3 applications, we can add an extra layer ofsecurity against threats such as data breaches and cyber-attacks.

5.4 Greater scalability: AI-driven applications can scale more efficiently than traditional applications due to their ability to automate tasks. This can help businesses save time and money as they expand their operations.

5.5 Better Decisions: Artificial intelligence can help make better decisions by providing information that would otherwise not be available.This includes understanding customer behavior, identifying trends, and predicting future results.

VI. Why web 3.0 essential.

The internet has made the world a better place in many ways. The Semantic Web is the next step in the evolution of the Internet and will ensure that we can always enjoy its benefits and avoid its setbacks. Web 3.0 is essential because it allows companies to simplify their operations by eliminating intermediaries and directly connecting computers. It facilitates communication and collaboration between employees, partners and customers, thereby increasing business efficiency.

VII. Future of web 3.0

By using peer-to-peer technology rather than relying on a central server, Web 3.0 allows users to communicate directly with each other without an intermediary. Not only does this give users more control over their data, but it also has the potential to create a more open and accessible internet for everyone. Web 3.0 aims to allow us to control information on the Internet and to create a Semantic web
Thus, machines will easily read and process user content. Block chain will enable decentralization, free digital identities with crypto wallets, and an open digital economy.

VIII. Conclusion

Web 3.0 is all about the backend of the web, about creating extreme machine interfacing. when the web 3.0 interface become more popular, it will entirely change the way we access the internet. We humans will no longer have to do the difficult tasks of researching on the internet and finding the exact information. machines will better do all these tasks. we only need to view the data and modify based on our wish.

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