



Into the METAVERSE

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Abstract

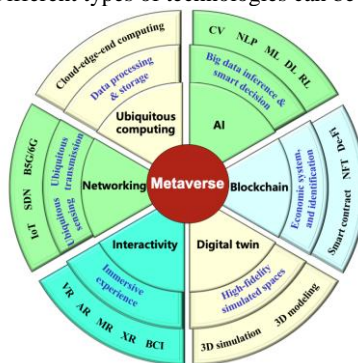
We describe the security threats faced by metaverse and all the technologies and architectures and research scope in metaverse. Some examples are being stated in the research work scubas ROBLOX. Different business sectors and educational sectors are highlighted in this research work. How the user base and other human computer interaction will affect the metaverse space.why it is necessary for people to be aware of the social conflicts and novel cause of these new emerging techniques. And as we have learned from previous examples and history to never bet against technology. We are highlighting the usage also in the later part of research . A simple methodology is being followed throughout the research .we later summarize the limitations and directions for implementing the immersive Metaverse as social influences, constraints, and open challenges. High precision of technology is needed as personal data of users is at stake.Metaverse is being strengthened with various factors, from mobile-based always-on access to connectivity with reality using virtual currency.

1.Introduction

Here we discuss details of a project whose objective was to highlight the major problems which METAVERSE will face regarding security.All the major factors are listed with some measures which can be taken to solve them. Security and other exchange of data is done with help of Blockchain Technology.The threats faced are briefly Categorized at the end of seminar. METAVERSE comprises many technologies and all of them are stated . Some of them are explained in detail.

1.1 Motivation

As a Society whenever we use new technologies we are concerned regarding security and other safety features related to the technology. METAVERSE is the latest topic for tech developers around the globe. METAVERSE comprises different types of technologies hence it is useful for every tech person and hence security is also important for the society. Different types of technologies can be used for this.



1.2 Aim and Objective(s) of the work

The use of Blockchain helps in METAVERSE Security other threats faced by users all around the world are also highlighted.

Project objectives:

- To demonstrate issues related to security of Metaverse.

- To demonstrate a novel aspect of blockchain technology for max security in the metaverse .
- A further dive into how metaverse actually works and all the technologies related to it are highlighted . All the issues are noted and stated clearly for better understanding of the metaverse.
- Singularity of metaverse is also imp and threat is stated.

2.Literature Survey For Into The METAVERSE

Table 1. Literature Survey

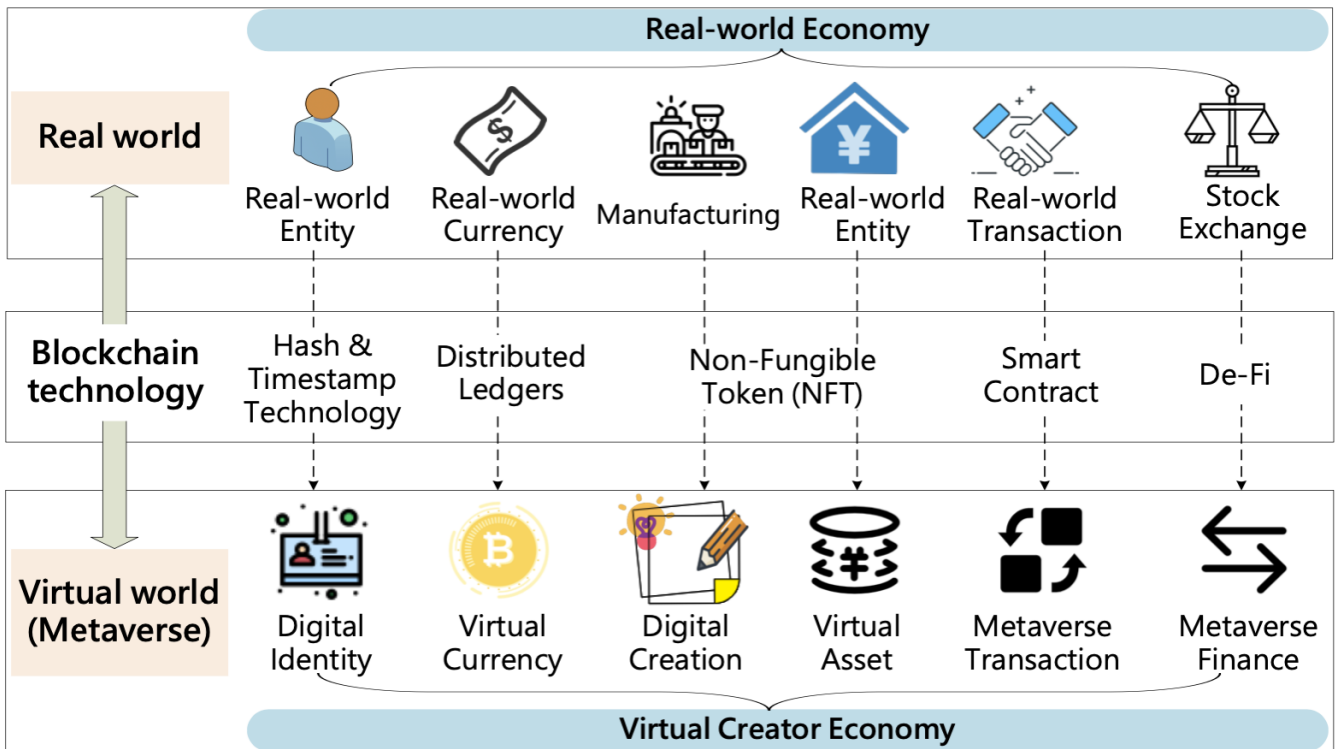
	Paper 1	Paper 2
Topic Name	A Metaverse: taxonomy, components, applications, and open challenges	A Survey on Metaverse: Fundamentals Security, and Privacy
Author Name	Sang-Min Park, Young-Gab Kim	Yuntao Wang,Zhou Su,Niug Zhang,Rui Xing,Dongxiao Liu,Tom H. Luan,Xuemin Shen
Journal Name	IEEE Access	IEEE Explore
Publication Year	4 Jan 2022	7 Sept 2022
Introduction	The Paper further summaries the limitations and directions for implementing the immersive Metaverse as social influences, constraints, and open challenges. The Paper analyzed research for similar concepts of Metaverse in Metaverse, avatar, and XR. Finally, the author discussed the aspect of social influence, limitation, and open challenges of Metaverse. Neuralink is a way to enhance communication with devices by implanting a chip in the human brain.	Author presents a comprehensive survey of the fundamentals, security, and privacy of metaverse, Then Further Author discusses the security and privacy threats, present the critical challenges of metaverse systems, and review the state-of-the-art countermeasures. Author draws open research directions for building future metaverse systems.

	Paper 3	Paper 2
Topic Name	Metaverse: Security and Privacy Issues	Metaverse beyond the hype: Multidisciplinary perspectives on emerging challenges, opportunities, and agenda for research, practice and policy
Author Name	Roberto Di Pietro	Lik-Hang Lee,Pengyuon zhou
Journal Name	IEEE	IEEE ACCESS
Publication Year	15 Dec 2021	Jan 2022
Introduction	Author start by analyzing the foundations of the metaverse, later He focus on the novel privacy and security issues introduced by this new paradigm and finally author after that author broaden the scope of the contribution highlighting some of the far-reaching yet logical implications of the metaverse on a number of domains, not all of them in tech. This paper refers to the social issues related with security if people and other tech related issues.	This study examines these topics in detail by combining the informed narrative and multi-perspective approach from experts with varied disciplinary backgrounds on many aspects of the metaverse and its transformational impact. The further academic analysis of how business can operate within the virtual world is vital but needs to be balanced by further research on the many ethical, behavioral and negative impacts on vulnerable users. This paper discuss the threats in a detailed manner.

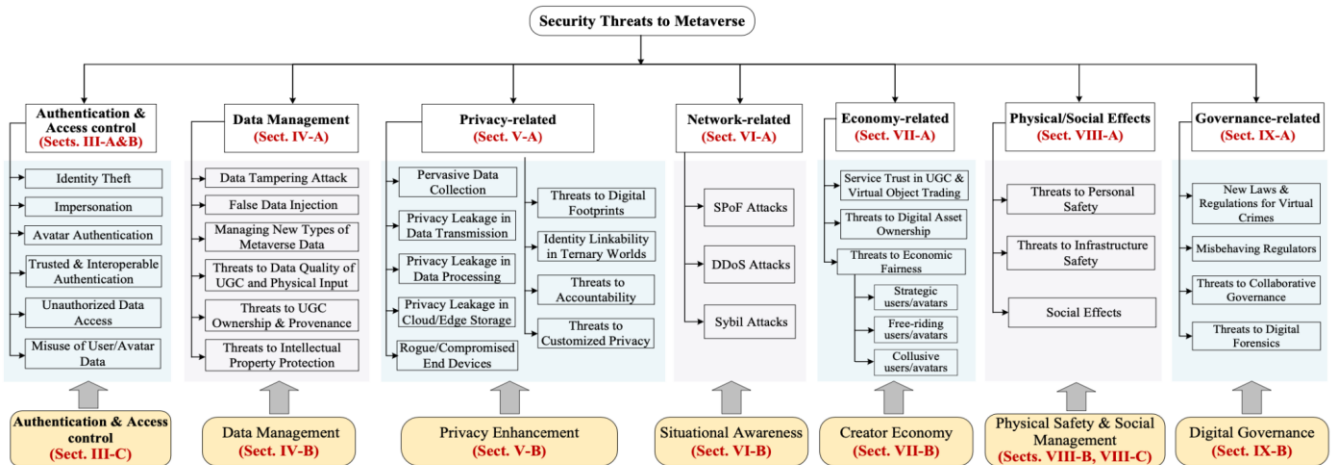
3.Characteristics

- 1)Scene/Object Recognition
- 2)Sound/Speech Recognition
- 3)Motion Rendering
- 4)Immersiveness
- 5)Hyper Spatiotemporality
- 6)Extended Reality

3.1 Architecture



2.1. Threats and Issues in analytical way



4.CONCLUSION

METAVERSE faces many issues and threats to users as an individual and as a human race too. so the factors affecting this are highlighted and provided with a solution for future reference and scope of research available in that field.

REFERENCES

- [1] Sang-Min Park,Young-Gab Kim,“A Metaverse: taxonomy, components, applications, and open challenges” IEEE Access, ISSN:2169-3536, Volume 10, January-2022.
- [2] Yuntao Wang,Zhou Su,Niug Zhang,Rui Xing,Dongxiao Liu,Tom H. Luan,Xuemin Shen,“A Survey on Metaverse: FundamentalsSecurity, and Privacy” IEEE Explore, ISSN:1553-877X, 7 Sept 2022.
- [3] Roberto Di Pietro “Metaverse: Security and Privacy Issues” IEEE, ISBN:978-1-6654-1623-8, 14 April 2022
- [4] Lik-Hang Lee,Pengyuon zhou,“Metaverse beyond the hype: Multidisciplinary perspectives on emerging challenges, opportunities, and agenda for research, practice and policy”, 3 Jan 2022.