



Metaverse: Virtual Gyms and Sports

Siva Raja Sindiramutty, Noor Zaman Jhanji (/affiliate/noor-zaman-jhanji/415447/), Sayan Kumar Ray, Husin Jazri (/affiliate/husin-jazri/456412/), Navid Ali Khan, Loveleen Gaur, Abdalla Gharib (/affiliate/abdalla-gharib/456415/), Amaranadha Reddy Manchuri

Source Title: Metaverse Applications for Intelligent Healthcare (/book/metaverse-applications-intelligent-healthcare/320471)

Copyright: © 2024

Pages: 69

DOI: 10.4018/978-1-6684-9823-1.ch002

OnDemand:
(Individual Chapters)

\$37.50

() Available

[Current Special Offers](#)



Abstract

In recent years, the concept of the metaverse has garnered substantial attention as an emerging digital realm that combines virtual reality, augmented reality, and various interactive technologies to create immersive and interconnected digital spaces. As traditional fitness routines and sports activities transform due to technological advancements, virtual gyms and sports have emerged as innovative solutions to engage individuals in physical activities within the metaverse. Dive into the dynamic realm of the metaverse with this chapter on virtual gyms and sports. The metaverse's business models, user experience design, and scaling strategies are explored, as are its applications in healthcare, therapy, and sports training. As the curtain falls, the authors delve into virtual fan engagement, community building, and future trends. The dynamic landscape of the metaverse awaits your exploration within these pages. Join the researchers in navigating the boundless possibilities of virtual gyms and sports, unraveling their impact on society, industry, and beyond.

Chapter Preview

Top

1. Introduction To The Metaverse

1.1 Definition and Evolution of the Metaverse

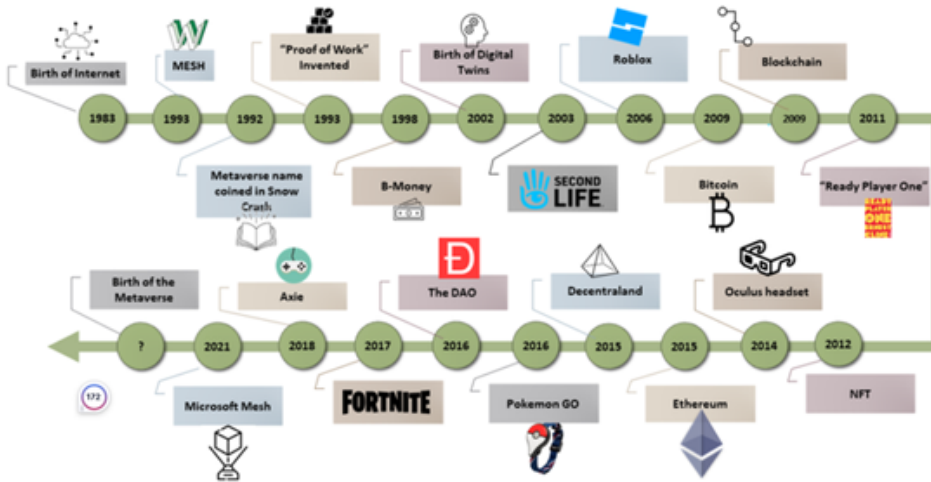
The metaverse concept has garnered substantial attention in recent times, owing to technological advancements and the increasing fusion of virtual and VR within our daily routines. The metaverse, characterized as a unified virtual communal realm arising from the intersection of physical and VR, encompasses a range of interconnected digital domains, including AR and VR platforms (Barbera, 2023; Humayun et al., 2020). Neal Stephenson originally coined the term "metaverse" in his 1992 science fiction novel "Snow Crash," wherein it denoted a VR-oriented successor to the internet. However, this notion has undergone notable evolution since its inception. As technological progress unfolded, the metaverse began crystallizing in the shape of online multiplayer games and virtual realms (Yilmaz et al., 2023; Almusaylim et al., 2018). The 2000s witnessed the emergence of platforms like Second Life, affording users the ability to craft avatars, engage with fellow users, and participate in diverse undertakings. These nascent endeavors to construct a metaverse laid the foundational framework for subsequent advancements.

In recent times, the metaverse's advancement has been fueled by remarkable technological strides. The fusion of VR and VR technologies has emerged as a pivotal force, engendering more captivating and participatory virtual realms. Industry giants such as Facebook (now Meta), Microsoft, and Apple have made substantial investments in the development of AR and VR hardware and software, thereby further obfuscating the demarcation between the tangible and digital domains (Parcu et al., 2023). The widespread proliferation of smartphones and cost-effective VR headsets has democratized access to these encounters (Pizzo, 2023). The maturation of the metaverse carries profound implications across multifarious sectors. In the realm of entertainment, the metaverse has orchestrated a paradigm shift in our interaction with media and content. Virtual concerts, art galleries, and interactive narrative experiences

are gaining prevalence (Rejeb et al., 2023; Chatrati et al., 2022). Furthermore, the metaverse possesses the potential to overhaul the landscape of education. Virtual classrooms and immersive pedagogical encounters have the capacity to render education more engrossing and attainable for students across the globe (Soni & Kaur, 2023).

The metaverse's impact extends beyond cultural and social dimensions, encompassing economic prospects as well. A thriving digital economy has taken root within the metaverse, characterized by the trade of virtual commodities and services facilitated by digital currencies such as cryptocurrencies (Şanlısoy & Çiloğlu, 2023). This phenomenon has catalyzed the emergence of the "creator economy," enabling individuals to monetize their digital innovations and proficiencies. Concurrently, businesses are delving into metaverse-centric marketing approaches, introducing novel methods to connect with consumers (Arya et al., 2023). Figure 1 shows the timeline evolution of metaverse.

Figure 1. Evolution of Metaverse



(https://igiprodst.blob.core.windows.net:443/source-content/9781668498231_320471/978-1-6684-9823-1.ch002.f01.png?sv=2015-12-11&sr=c&sig=KiCWItcJyNZoGyFMgBYmhM%2FsPvy0ZzIHJGC%2FJYpftPs%3D&se=2023-12-25T18%3A40%3A46Z&sp=r)
 Source: Glen (2023)

Complete Chapter List

Search this Book:

Reset

Table of Contents	View Full PDF (/pdf.aspx?tid=334342&ptid=320471&ctid=15&t=Table of Contents&isxn=9781668498231)
Detailed Table of Contents	View Full PDF (/pdf.aspx?tid=334343&ptid=320471&ctid=15&t=Detailed Table of Contents&isxn=9781668498231)
Preface Loveleen Gaur, Noor Zaman Jhanjhi	View Full PDF (/pdf.aspx?tid=334344&ptid=320471&ctid=15&t=Preface&isxn=9781668498231)
Chapter 1 Demystifying Metaverse Applications for Intelligent Healthcare (/chapter/demystifying-metaverse-applications-for-intelligent-healthcare/334345) (pages 1-23) Loveleen Gaur, Devanshi Gaur, Anam Afaq	<p>Preview Chapter \$37.50 (/viewtitlesample.aspx?id=334345&ptid=320471&t=Demystifying Metaverse Applications for Intelligent Healthcare&isxn=9781668498231) Add to Cart</p>
Chapter 2 Metaverse: Virtual Gyms and Sports (/chapter/metaverse/334346) (pages 24-92) Siva Raja Sindiramutty, Noor Zaman Jhanjhi, Sayan Kumar Ray, Husin Jazri, Navid Ali Khan, Loveleen Gaur, Abdalla Gharib, Amaranadha Reddy Manchuri	<p>Preview Chapter \$37.50 (/viewtitlesample.aspx?id=334346&ptid=320471&t=Metaverse: Virtual Gyms and Sports&isxn=9781668498231) Add to Cart</p>

Chapter 3

Metaverse: Virtual Meditation (/chapter/metaverse/334347) (pages 93-158)

Siva Raja Sindiramutty, Noor Zaman Jhanjhi, Sayan Kumar Ray, Husin Jazri, Navid Ali Khan, Loveleen Gaur

Preview Chapter **\$37.50**(/viewtitlesample.aspx? Add to Cart
id=334347&ptid=320471&t=Metaverse:
Virtual
Meditation&isxn=9781668498231)**Chapter 4**

A Combined Survey on Machine Learning for Cognitive Radio Deployed on Secure WBAN Environments (/chapter/a-combined-survey-on-machine-learning-for-cognitive-radio-deployed-on-secure-wban-environments/334348) (pages 159-181)

M. V. Karthikeyan, Tephillah Sophia, M. Senthil Murugan, D. Suresh, M. Samayaraj Murali Kishanlal, T. Siva

Preview Chapter **\$37.50**(/viewtitlesample.aspx? Add to Cart
id=334348&ptid=320471&t=A
Combined
Survey on
Machine
Learning for
Cognitive Radio
Deployed on
Secure WBAN
Environments&isxn=9781668498231)**Chapter 5**

A Metaverse-Based Approach to Rehabilitation Healthcare (/chapter/a-metaverse-based-approach-to-rehabilitation-healthcare/334349) (pages 182-202)

V. Vivekitha, S. Caroline Vinneta, R. Sri Roshini

Preview Chapter **\$37.50**(/viewtitlesample.aspx? Add to Cart
id=334349&ptid=320471&t=A
Metaverse-Based
Approach to
Rehabilitation
Healthcare&isxn=9781668498231)**Chapter 6**

Deep Learning Perspectives for Prediction of Diabetic Foot Ulcers (/chapter/deep-learning-perspectives-for-prediction-of-diabetic-foot-ulcers/334350) (pages 203-228)

Aman Sharma, Archit Kaushal, Kartik Dogra, Rajni Mohana

Preview Chapter **\$37.50**(/viewtitlesample.aspx? Add to Cart
id=334350&ptid=320471&t=Deep
Learning
Perspectives for
Prediction of
Diabetic Foot
Ulcers&isxn=9781668498231)**Chapter 7**

Metaverse System for Patients` Safety (/chapter/metaverse-system-for-patients-safety/334351) (pages 229-247)

Calin Ciufudean, Corneliu Buzduga

Preview Chapter **\$37.50**(/viewtitlesample.aspx? Add to Cart
id=334351&ptid=320471&t=Metaverse
System for
Patients`
Safety&isxn=9781668498231)**Chapter 8**

Ethical Considerations in the Use of the Metaverse for Healthcare (/chapter/ethical-considerations-in-the-use-of-the-metaverse-for-healthcare/334352) (pages 248-273)

Loveleen Gaur, Devanshi Gaur, Anam Afaq

Preview Chapter **\$37.50**(/viewtitlesample.aspx? Add to Cart
id=334352&ptid=320471&t=Ethical
Considerations in
the Use of the
Metaverse for
Healthcare&isxn=9781668498231)

Chapter 9

Metaverse for Healthcare: Possible Potential Applications (Virtual Reality Technologies), Opportunities, Challenges, and Future Directions (/chapter/metaverse-for-healthcare/334353) (pages 274-305)

Hafiz Asif, Rabia Zahid, Uzma Bashir, Waseem Afzal, Misbah Firdous, Ahsan Zahid, Muhammad Hasnain

Preview Chapter **\$37.50**
(/viewtitlesample.aspx? Add to Cart
id=334353&ptid=320471&t=Metaverse
for Healthcare:
Possible
Potential
Applications
(Virtual Reality
Technologies),
Opportunities,
Challenges, and
Future
Directions&isxn=9781668498231)

Chapter 10

The Future of Telemedicine: Emerging Technologies, Challenges, and Opportunities (/chapter/the-future-of-telemedicine/334354) (pages 306-338)

Robertas Damaševičius, Olusola O. Abayomi-Alli

Preview Chapter **\$37.50**
(/viewtitlesample.aspx? Add to Cart
id=334354&ptid=320471&t=The
Future of
Telemedicine:
Emerging
Technologies,
Challenges, and
Opportunities&isxn=9781668498231)

About the Contributors

View Full PDF (/pdf.aspx?
tid=334356&ptid=320471&ctid=17&t>About the
Contributors&isxn=9781668498231)

Index

View Full PDF (/pdf.aspx?
tid=334357&ptid=320471&ctid=17&t=Index&isxn=9781668498231)

Learn More

About IGI Global (/about/) | Partnerships (/about/partnerships/) | COPE Membership (/about/memberships/cope/) | Contact Us (/contact/) | Job Opportunities (/about/staff/job-opportunities/) | FAQ (/faq/) | Management Team (/about/staff/)

Resources For

Librarians (/librarians/) | Authors/Editors (/publish/) | Distributors (/distributors/) | Instructors (/course-adoption/) | Translators (/about/rights-permissions/translation-rights/)

Media Center

Webinars (/symposium/) | Blogs (/newsroom/) | Catalogs (/catalogs/) | Newsletters (/newsletters/)

Policies

Privacy Policy (/about/rights-permissions/privacy-policy/) | Cookie & Tracking Notice (/cookies-agreement/) | Fair Use Policy (/about/rights-permissions/content-reuse/) | Accessibility (/accessibility/) | Ethics and Malpractice (/about/rights-permissions/ethics-malpractice/) | Rights & Permissions (/about/rights-permissions/)

(http://www.facebook.com/pages/IGI-Global/138206739534176?ref=sgm)

(http://twitter.com/igiglobal)

(https://www.linkedin.com/company/igi-global) | (http://igiglobal.org) | (http://igiglobal.org/child-forgotten-children.org)

(https://publicationethics.org/category/publisher/igi-global)



