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Virtual Reality: Advancements, Applications, Algorithms, and Future Prospects

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Abstract: Virtual Reality (VR) has revolutionized various domains, including healthcare, education, gaming, and industrial applications. This paper explores the advancements in VR technology, its applications, algorithms used, and future prospects. The study highlights the impact of VR on different sectors and discusses the challenges and opportunities associated with its adoption. Additionally, various algorithms that contribute to enhancing VR experiences, such as rendering algorithms, tracking algorithms, and AI-driven interactions, are explored.

Keywords: Virtual Reality, Immersive Technology, Algorithms, Applications, Future Trends, Challenges.

