

## **Exploring the Future of Fashion Design in Metaverse**

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**Abstract:** The integration of fashion design within metaverse virtual environments represents a significant evolution in both the fashion industry and digital technology. This study explores how fashion design processes are transforming in response to the advent of the metaverse, with a particular focus on the methodology for integrating three-dimensional (3D) models into Unity3D. By leveraging 3D computer-aided design (CAD) platforms such as CLO3D, the fashion industry can create innovative digital garments that enhance sustainability and minimise material waste. Unity3D serves as a professional cross-platform game engine and development tool, facilitating the seamless import and development of 3D models for virtual reality (VR) applications. This research investigates the structured pipeline required for this integration, highlighting its potential to revolutionise fashion design through immersive virtual environments and advanced 3D digital tools.

**Keywords:** Metaverse, fashion design, virtual reality, digital fashion.