

Revolutionizing Architectural Designing with Augmented Reality Technology

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Abstract

Augmented reality (AR) technology has enormous potential for architectural designing. By overlaying digital information onto the real world, AR technology allows architects and designers to visualize and interact with 3D models of buildings in a more natural and intuitive way. One of the key benefits of AR technology for architectural designing is the ability to create digital overlays of building designs, which can be viewed and interacted with in a real-world context.

This allows designers to see how their designs will look and feel in a real-world environment, and to make adjustments accordingly. For example, an architect could create an AR overlay of a building design and then walk around the site, viewing the design from different angles and in different lighting conditions.

Keywords: Architectural designing • Augmented reality technology • 3D models

Introduction

AR technology can also be used to enhance the communication and collaboration process between architects, designers, and clients. By using AR headsets or mobile devices, clients can view and interact with digital overlays of building designs, which can help them to better understand and visualize the design concepts. In addition, AR technology can be used to enhance the construction process itself. Construction workers can use AR headsets or mobile devices to see digital overlays of building plans, which can help them to visualize how different components fit together and to identify potential issues before they become problems. This can help to reduce errors and improve the efficiency of the construction process.

AR technology can also be used to enhance the user experience of buildings. For example, visitors to a museum or art gallery could use AR headsets or mobile devices to see digital information overlaid onto exhibits, such as historical information or contextual details. Overall, AR technology has enormous potential for architectural designing, construction, and user experience [1]. As the technology continues to evolve and improve, we are likely to see even more exciting and innovative applications in the years to come.

Description

Augmented reality (AR) technology has the potential to transform the way we interact with 3D models of buildings. By overlaying digital information onto the real world, AR technology allows us to view and interact with 3D models in a more natural and intuitive way. One of the key benefits of AR technology

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Received: 05 December, 2022; Manuscript No. jssc-23-94778; **Editor Assigned:** 07 December, 2022; Pre QC No. P-94778; **Reviewed:** 19 December, 2022; QC No. Q-94778; **Revised:** 24 December, 2022, Manuscript No. R-94778; **Published:** 31 December, 2022, DOI: 10.37421/2472-0437.2022.8.170

for 3D models of buildings is the ability to view and interact with the models in a real-world context. For example, an architect could create an AR overlay of a building design and then walk around the site, viewing the design from different angles and in different lighting conditions. This allows architects and designers to better understand how their designs will look and feel in a real-world environment, and to make adjustments accordingly [2].

AR technology can also be used to enhance the communication and collaboration process between architects, designers, and clients. By using AR headsets or mobile devices, clients can view and interact with digital overlays of 3D models of buildings, which can help them to better understand and visualize the design concepts. In addition, AR technology can be used to enhance the construction process itself. Construction workers can use AR headsets or mobile devices to see digital overlays of 3D models of buildings, which can help them to visualize how different components fit together and to identify potential issues before they become problems. This can help to reduce errors and improve the efficiency of the construction process.

AR technology can also be used to enhance the user experience of buildings. For example, visitors to a museum or art gallery could use AR headsets or mobile devices to see digital information overlaid onto exhibits, such as historical information or contextual details [3]. AR technology has enormous potential for 3D models of buildings, from design and construction to user experience. As the technology continues to evolve and improve, we are likely to see even more exciting and innovative applications in the years to come.

Augmented reality (AR) technology is a rapidly evolving field that has the potential to revolutionize the way we interact with the world around us. AR technology overlays digital information onto the real world, creating a hybrid environment that combines the physical and digital realms. This technology has a wide range of applications, from gaming and entertainment to education and healthcare. One of the key benefits of AR technology is that it allows users to interact with digital content in a more natural and intuitive way [4]. Instead of being confined to a computer screen or mobile device, users can see digital information overlaid onto the real world, which can enhance their understanding and experience of a particular environment or situation.

In the field of architecture, AR technology has the potential to revolutionize the way buildings are designed and constructed. Architects and designers can use AR technology to create digital overlays of building designs, which can be viewed and interacted with in a real-world environment. This allows designers to get a better sense of how their designs will look and feel in a real-world context, and to make adjustments accordingly [5]. AR technology can also be

used to enhance the construction process itself. Construction workers can use AR headsets or mobile devices to see digital overlays of building plans, which can help them to visualize how different components fit together and to identify potential issues before they become problems.

Conclusion

In addition, AR technology can be used to enhance the user experience of buildings. For example, visitors to a museum or art gallery could use AR headsets or mobile devices to see digital information overlaid onto exhibits, such as historical information or contextual details. AR technology also has applications in healthcare, where it can be used to enhance medical training and patient care. Medical professionals can use AR headsets or mobile devices to see digital overlays of patient data, such as MRI scans or X-rays, which can help them to visualize and diagnose medical conditions more accurately.

Overall, AR technology has the potential to revolutionize the way we interact with the world around us, from entertainment and education to healthcare and architecture. As the technology continues to evolve and improve, we are likely to see even more exciting and innovative applications in the years to come.

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How to cite this article: Sekiya, Fatima. "Revolutionizing Architectural Designing with Augmented Reality Technology." *J Steel Struct Constr* 8 (2022): 170.