

Augmented Reality in Engineering Design and Simulation

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Abstract. This article investigates the use of augmented reality (AR) in engineering design and simulation. By overlaying digital information onto physical models, AR enhances the visualization and interaction capabilities for engineers. The study highlights the benefits of AR in improving design precision and facilitating collaborative efforts among engineering teams, ultimately leading to more innovative and efficient engineering solutions.

Keywords: augmented reality, engineering design, simulation, visualization, collaborative engineering

Introduction

Augmented reality (AR) technology is revolutionizing the way engineers approach design and simulation tasks. By providing a seamless blend of digital information with the physical world, AR enables a new level of interaction and visualization for engineering projects. This paper examines the application of AR in engineering design, focusing on its impact on precision and teamwork. Through case studies and practical examples, the research demonstrates how AR tools can enhance design accuracy and foster collaboration among engineers, leading to more innovative solutions. By bridging the gap between digital models and real-world applications, AR is set to transform engineering practices fundamentally.

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