

# AR Furniture App: Challenges and Future Prospects

**Soham Aurade<sup>1</sup>, Pratik Singh<sup>2</sup>, Parth Bhoir<sup>3</sup>, Mrs. Shobhana Gaikwad<sup>4</sup>**

Students, Department of Computer Technology<sup>1,2,3</sup>

Faculty, Department of Computer Technology<sup>4</sup>

Bharati Vidyapeeth Institute of Technology, Kharghar, Navi Mumbai, India

**Abstract:** *Augmented Reality (AR) applications are revolutionizing user experiences by seamlessly blending digital content with the real world. This paper presents an AR app designed to enhance interaction, visualization, and engagement in various domains, including education, entertainment, retail, and healthcare. The app leverages advanced AR technologies such as real-time object recognition, spatial mapping, and interactive 3D overlays to create immersive experiences. Using a smartphone or AR headset, users can interact with virtual elements overlaid on their physical surroundings. The app incorporates intuitive controls, AI-powered personalization, and cloud integration for real-time data processing. This AR solution aims to improve user engagement, accessibility, and efficiency across industries, demonstrating the potential of AR in shaping the future of digital interaction.*

**Keywords:** Augmented Reality, AR app, real-time object recognition, spatial mapping, interactive 3D overlays, immersive experiences, AI-powered personalization, cloud integration, user engagement, digital interaction.