



ARTIVERSE 2.0

Team Name : Tech Spryzen

Theme : AR/VR

Title : Revolutionizing Gaming with AI and AR

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ABSTRACT

This project aims to innovate gaming experiences by integrating Artificial Intelligence (AI) and Augmented Reality (AR). The focus is on creating immersive, interactive environments where AI-driven Non-Player Characters (NPCs) display realistic behaviours, and AR seamlessly blends virtual and real-world elements. AI algorithms, including reinforcement learning and neural networks, will power NPCs to adapt and respond intelligently in real-time, enhancing gameplay dynamics. AR integration will employ spatial mapping and toolkits like ARCore or ARKit to craft mixed-reality environments, offering players unparalleled interactivity. The project will also utilize procedural generation to design adaptable game levels and challenges based on individual player preferences and performance. Real-time analytics will monitor player actions, providing feedback and insights for continuous gameplay refinement. Built using the Unity engine, with AI frameworks like TensorFlow and PyTorch, this project seeks to redefine entertainment through technology. It combines realism, personalization, and immersion, setting new standards for gaming innovation while pushing the boundaries of interactive media.

KEYWORDS: AI, AR, immersive gaming, NPC behavior, real-time learning, Unity, procedural generation, mixed-reality, reinforcement learning, gaming innovation.

Technologies Used:

Unity engine, TensorFlow, PyTorch, ARCore, ARKit, spatial mapping tools, reinforcement learning algorithms, neural networks.