

AUGMENTED REALITIES : ENHANCING APPLICATIONS WITH AR

T Swapna AR



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Augmented Realities: Enhancing Applications with AR

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PREFACE

Augmented reality applications allow people to interact meaningfully with the real world through digitally enhanced content.

The book helps you in setting up environment for AR development, installing the Unity 3D game engine, required packages, and other tools to develop for Android (ARCore) and/or iOS (ARKit) mobile devices. Then we jump right into the building and running AR scenes, learning about AR Foundation components, other Unity features.

Augmented reality has great potential in enhancing the learning experience in education. It enables students to interact with digital content in a more immersive way, bringing abstract concepts to life and making learning more engaging and fun.

The marketing sector has also adopted AR technology to create engaging and interactive branding experiences. Most of these applications are marker-based, which means that virtual content is triggered when the AR camera is directed at a particular target, such as a paper advertisement.

However, there is a lack of marker-less AR advertising applications that are readily available for businesses to use. To address this, a real-time marker-less augmented reality platform has been proposed that can stream and showcase virtual marketing assets in front of shops.

This chapter emphasizes the significance of the "map" in augmented reality (AR) systems, which plays a crucial role in determining the device's position and orientation in a known environment. To address the challenge of generating and evaluating AR Maps, an efficient end-to-end solution is proposed.

The concept and implementation of Augmented Reality (AR) in various domains, including gaming, multimedia, and physical health. it first provides an overview of AR technology, its evolution, and its current state of development. It then discusses the benefits of AR technology in various domains, including entertainment, education, and military.

In the last chapter an automated facial action recognition (AFAR) was employed to characterize facial expressions using action units (AU) and their intensities, which serve as semantic locations and control labels for the system

By the end of this AR book, you will be able to build your own AR applications, engaging your users in new and innovative ways.

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