



Innovating with Augmented Reality

Applications in Education and Industry

Edited by **P Kaliraj** and **T. Devi**

Augmented Reality (AR) has many advantages that include increased engagement and interaction as well as enhanced innovation and responsiveness. AR technology has applications in almost all domains such as medical training, retail, repair and maintenance of complex equipment, interior design in architecture and construction, business logistics, tourism, and classroom education. **Innovating with Augmented Reality: Applications in Education and Industry** explains the concepts behind AR, explores some of its application areas, and gives an in-depth look at how this technology aligns with Education 4.0.

Due to the rapid advancements in technology, future education systems must prepare students to work with the latest technologies by enabling them to learn virtually in augmented ways in varied platforms. By providing an illusion of physical objects, which takes the students to a new world of imagination, AR and Virtual Reality (VR) create virtual and interactive environments for better learning and understanding. AR applications in education are covered in four chapters of this book, including a chapter on how gamification can be made use of in the teaching and learning process.

The book also covers other application areas of AR and VR. One such application area is the food and beverage industry with case studies on virtual 3D food, employee training, product-customer interaction, restaurant entertainment, restaurant tours, and product packaging. The application of AR in the healthcare sector, medical education, and related devices and software are examined in the book's final chapter. The book also provides an overview of the game development software, Unity, a real-time development platform for 2D and 3D AR and VR, as well as the software tools and techniques used in developing AR-based apps.

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