

Engineering Education in Virtual Reality: A Case Study of the "Submarine Simulator" for STEM Education

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This paper showcases "Submarine Simulator," a custom-built virtual reality (VR) application developed to enhance underwater engineering competencies in STEM education. The research aims to leverage this application in order to demonstrate and identify the key characteristics that make VR tools highly suitable for educational purposes. We explore how careful technical considerations and UI/UX principles contribute to immersive learning and boost student engagement within this context. Valuable insights for designing and integrating robust VR solutions into engineering curricula will be presented, highlighting the vital role of well-engineered applications in achieving educational objectives.

Keywords: Virtual Reality, Engineering Education, Engineering Simulation, Immersive Technologies

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