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College Campus Tour using AR/VR

Yukta Badgujar¹, Shruti Pardeshi², Abhishek Kendre³, Aditya Khairnar⁴, Prof. S. G. Chordiya⁵

Students, Department of Artificial Intelligence and Data Science^{1,2,3,4}

Guide, Department of Artificial Intelligence and Data Science⁵

Pune Vidyarthi Griha's College of Engineering and Shrikrushna S. Dhamankar Institute of Management, Nashik Savitribai Phule Pune University (SPPU)

yuktabadgujar14¹@gmail.com, shrutipardeshi30²@gmail.com, abhishekkendre³@gmail.com, adityaa.khairnar⁴@gmail.com, sanket.chordiya@pvgcoenashik.org

Abstract: This project focuses on developing an immersive 360° virtual campus tour using augmented and virtual reality (AR/VR) technologies to enhance accessibility and engagement for prospective students, alumni, and visitors. Integrated into the college's official website, this virtual tour enables users to explore key campus locations, view event-based images and information by selecting specific dates, and experience campus life from a remote setting. By leveraging high-definition 360° video and interactive elements, the project addresses challenges in accessibility, engagement, and marketing faced by traditional static campus presentations. The system architecture includes modules for video capture, interactive feature integration, and seamless website embedding, utilizing advanced technologies like WebGL, A-Frame, and machine learning algorithms for content retrieval and event-based data integration. The project aims to increase the institution's digital presence and support recruitment and alumni engagement.

Keywords: Virtual campus tour, augmented reality, virtual reality, 360° video, user engagement, machine learning, interactive features, accessibility.

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