

# **Exploration Using Augmented and Virtual Reality**

Submitted in partial fulfilment of the requirements

of the degree of

**Bachelor of Engineering**

by

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under the guidance of

Supervisor:

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Department of Information Technology

**Vivekanand Education Society's Institute of Technology**

2017-18



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# Vivekanand Education Society's Institute of Technology

(Affiliated to University of Mumbai, Approved by AICTE & Recognized by Govt. of Maharashtra)

## Department of Information Technology

### CERTIFICATE

This is to certify that **Mr Vaibhav Goyal, Ms Radhika Raghuwanshi and Ms Rohini Yedelli** of Fourth Year Information Technology studying under the University of Mumbai have satisfactorily presented the project entitled **Exploration Using Augmented and Virtual Reality** as a part of the PROJECT-I for Semester-VII under the guidance of **Mrs Smita Jangale** in the year 2017-2018.

Date: 31/10/2017

(Name and Sign)

External Supervisor

Mrs. Shalu Chopra  
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## Abstract

In this advanced era of technology, people believe what they see and experience through their eyes. Virtual Reality is a computer simulated reality which replicates a real environment, and simulate a user's physical presence in this environment while Augmented Reality blurs the line between what's real and what's computer-generated by enhancing what we see, hear and feel. This alone showcases the potential of Virtual and Augmented Reality in fields of gaming, e-commerce, tourism, education etc. to provide real life experiences.

The proposed android application “Exploration” will be a perfect blend of virtual and augmented reality. “Exploration” will have various functionalities like providing 3D view of different tourist places objects around you in the real world and also help students to view 3D complex structure in real world which would be difficult to imagine. The main aim of “Exploration” would be to provide a more immersive and interactive real environment to everyone.

**Keywords:** Augmented Reality , Virtual Reality , Target , Recognition based AR , Virtual Environment, Marker, Vuforia, Unity.