

**CAMPUS VIRTUAL REALITY TOUR GUIDE USING  
IMMERSIVE VIRTUAL ENVIRONMENT**

**A Thesis Presented to the Faculty of the  
College of Communication and Information Technology  
President Ramon Magsaysay State University  
Castillejos, Zambales**

**In Partial Fulfillment of the Requirements for the Degree  
Bachelor of Science in Computer Science**

**By:  
Arvin Hipolito  
Joseph Smith Bermas  
Dan Arman Pingue**

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**PRESIDENT RAMON MAGSAYSAY STATE UNIVERSITY**  
*(Formerly Ramon Magsaysay Technological University)*  
 Castillejos Campus  
 Castillejos, Zambales



**APPROVAL SHEET**

The thesis project entitled “**Campus Virtual Reality Tour Guide using Immersive Virtual Environment**” was prepared and submitted by **Arvin Hipolito, Joseph Smith Bermas, and Dan Arman Pingue** in partial fulfillment of the course requirements for the degree of **Bachelor of Science in Computer Science** has been examined and recommended for the oral examination.

**IRATUS GLENN A. CRUZ, MSCS**  
 Thesis Adviser

Approved by the Panel of Examiners  
 with a rating of 94 %

**MICHAEL G. ALBINO, MIT**  
 Chair

**MICHAEL N. FARIN, MSCS**  
 Member

**MARIE CELIA R. AGLIBOT, MSCS**  
 Member

Accepted and approved as a requirement for the degree of **BACHELOR OF SCIENCE IN COMPUTER SCIENCE**.

**June 2023**  
 Date

**IVY H. CASUPANAN, EdD**  
 Campus Director

## ABSTRACT

Choosing which course to pursue for college is already challenging in its own right and add to that picking which school to go to colleges, and universities in Zambales. This study aims to build a "Virtual Reality Application" of the campus for students who are not familiar with the actual environment. The application allows users to view the structure of an architectural design from both external and internal perspectives. Users will be able to become familiar with the university's buildings and surroundings, allowing them to explore the facilities and their purposes.

This study utilizes a descriptive research design to address specific difficulties or problems, employing Incremental Methodology, a trusted approach in software development. The evaluation of the application was conducted using a modified-adapted questionnaire based on ISO 25010. The application received a rating with a weighted mean of (3.58) for functionality, (3.58) for reliability, (3.63) for usability, (3.58) for efficiency, (3.57) for portability, (3.54) for security, and (3.62) in performance. The developed application gained "Strongly Agree" as an overall result from IT experts and respondents.

The researcher concluded that the application effectively presented the real structure of PRMSU Castillejos Campus. Based on the evaluation results from IT experts and respondents. Users were able to navigate the virtual environment and access relevant school information. It is therefore recommended to improve user experience and interactivity in the application by incorporating virtual interaction buttons and enhancing graphics for a better visual experience.

Keywords: (Virtual Reality Application, Immersive Virtual Environment, Visual Experience)