

Case Study

Missouri University Pure Research Virtual Reality

Project Overview

Brad Martin, from Another Reality Studio, worked with the University of Missouri to develop a 2x2x2 experiment to understand an individual's perception and memory of a space based on still, stereo (VR), and colored/realistic renderings. The goal of the experiment is to prove a hypothesis that realism and perception help an individual to remember a space and understand the space better. After a subject viewed an image, the project captured data of memory and dimensions to see which format and style offered the best results.

Key Features

- (3) rendered spaces in grayscale, colored, realistic styles in both 2D and stereo formats.
- Controlled testing environments.
- Research and development findings.
- Several technology variables were utilized as conditions of the study: stereoscopy, field of view, and Photorealism.
- Measures for spatial presence, spatial comprehension and memory
- Data analysis with immersive tendencies of the participants were measured using an 11 item scale.



Challenges and Core Considerations

- Create interesting and unique renderings for user understanding and memory.
- Stereo/realistic rendering should offer the most visual data to improve memory and understanding of a space, whereas 2D grayscale renderings should offer the least.

Impact: The ARS Solution

- Hypothesis was proven.
- Paper was submitted and won entrance to Taiwan Conference.

