Introduction

In the world of augmented reality, the real world is purely a background and the virtual objects are superimposed as the foreground objects of this world.

These virtual objects appear in front of any real-world object when rendered as they don’t have any sense of depth.

For a more realistic augmentation of objects you want them to interact with the real-world object, cast shadows just like the real-world object and reflect light like the real-world objects.

This project focuses on handling occlusions between the real and virtual objects.

Observations and Results

Input:
- Frames of scene viewed by the user
- Depth data of the scene
- Selection of object

Processing:
- Segment the selected object from the surrounding.
- Cluster the depth into 5 different levels.

Output:
- Create a final clipping mask with depth level selected and selected real object.
- Virtual object clipped by mask.
- Display final output of virtual object occluded by real object.