## Immersive Art With Natural Interaction In Mixed Reality

Xiangpeng Fu, Master of Science in Computer Science University of Dublin, Trinity College, 2022

Supervisor: Mads Haahr

## Abstract

This Master's Thesis intends to implement an immersive art prototype that allows users to be immersed in a mixed reality environment full of flowers. This prototype is based on Oculus quest 2 head-mounted display(HMD), Zed Mini Stereo Camera, and Leap Motion Controller. Leap Motion allows users to interact with virtual objects and interface freehand.

The three critical steps of this project are the setup of the Oculus quest 2 HMD, Zed Mini Camera, and the Leap Motion Controller, the design and implementation of the immersive art content and interaction method, and the discussion of user immersive experiment usability study of natural interaction.

## Keywords

Immersive art, mixed reality, natural interaction, Oculus quest 2, Zed Mini Camera, Leap Motion