

# Hand Tracking and object reaction to human movement

## Lin Shao

### Introduction

Currently there are few projects focusing on the interaction between human and object. However the interaction is becoming more and more important. Hand tracking is one of the center problems. Fortunately leap motion has provided a novel way to interact with objects by tracking hands.

Following the hand tracking, object has to react to hand movement. We also want to study how object will react to human movement. We believe by combining hand tracking and object reaction we could make progress in studying interaction.

Devices.

I got a leap motion.

Timeline

Week 7 Familiar with Leap motion API

Week 8 Study the reaction of object

Week 9 Combine both parts to produce a live demo

Output

Live demo

Object reaction pattern to hand movement

Reference

Free-Hand Interaction with Leap Motion Controller for Stroke Rehabilitation

Investigating the Usability of the Leap Motion Controller: Gesture-Based Interaction with a 3D Virtual Environment

Evaluation of the leap motion controller as a New Contact-Free Pointing Device