**ABSTRACT** 

Virtual interaction is an activity that allows users in the real world to interact

with something in the virtual world. Creating an interaction between real objects

and virtual objects is an important aspect that needs to be considered in the

development of virtual reality (VR) technology.

In this study, a Unity3D project is created to virtualize finger movements based

on motion capture data, where the user uses a motion capture tool and the moves

his finger. The movement data then used by Unty3D to move the fingers of the 3D

model. User can interact by using the finger movements.

Based on the results of the research conducted, there is a 28.23 second delay

in the virtual finger movement process, due to the process of sending data

sequentially and also network traffic at the time of data retrieval. Virtual hands on

Unity3D can imitate all real finger movements so that it has 100% accuracy in

movement suitability.

**Keywords:** *Virtual Reality, Motion Capture, Unity3D.* 

iv