ABSTRACT

EVALUATION OF ACCURACY OF SKELETON TRACKING AND DEPTH SENSOR ON MICROSOFT KINECT

There are a lot of studies that use Microsoft Kinect as its device to interact with the system, either stand-alone or integrated into other fields, such as robotics, medical, and entertainment. Of the many studies that have been conducted are to evaluate the performance of Microsoft Kinect. Features that are generally tested are the skeleton tracking, depth sensor, and others. This is generally done to determine the influence of certain factors on the performance of Microsoft Kinect or test the sensor feasibility when applied in certain circumstances. This research aimed to determine the effect the objects of everyday ordinary human beings held by the level of accuracy of execution on the Microsoft Kinect gesture so that it can become the information for future research in developing a system that uses Microsoft Kinect as its device of interaction. The system will be modeled using the Unified Modeling Language (UML) and implemented using C# programming language and Kinect for Windows SDK library. Results from this study is the percentage level of accuracy of execution gesture for every object that was tested on the system interface.

Keywords: ***Kinect, Accuracy, Skeleton Tracking, Depth Sensor, UML, C#***