Real Time Human Gesture Simulation

K.M.S.Y. Konara*, N.S. Colombage, D.M.W.A. Dassanayake, and R.A.D.M. Vijesiri

Faculty of Engineering, University of Ruhuna

Abstract

In this paper design and implementation of a real time human gesture simulation system is reported. We consider developing a 3D computer model as well as a mechanical robotic hand operates simultaneously according to the tracked hand gestures from a data glove (Acceleglove). To achieve this we developed .NET framework applications based on a mathematical model of the human hand, to control the robotic hand and the 3D computer model.

In presenting the procedure of the project authors describe the data extraction process which is the base of the project and after that all the necessary information is given for both 3D computer model as well as the mechanical model with the control mechanism.

Keywords: Virtual Reality Applications, Gesture Simulation, Robot Hand

* konara@ieee.org