Analysis of finger movement by using motion information from glovemap and motion capture system

Abstract

Nowadays, through the advancement of science and technology, possibility of human finger provide information into computer is no longer question. Fingers movement and hand motion continuously being center of research in human computer interaction (HCI) and robotic controls. Using self-develop DataGlove, an experiment was conducted by using motion capture System (MOCAP) equipped with five motion capture cameras to capture human finger movements. The purpose of this paper is to analyze voltage output from DataGlove and angle obtains from motion capture system while constructing relationship concerning both outcomes. Polynomial equation is considered toward the construction of fitting curve line in scatter data. Through the end of project, differences between finger graphs slopes will be clarify. Preliminary result of experiment exposed the newly develop DataGlove output might closely relate into angle of finger bending movement.

Keywords