Abstract

In this paper, a communication system is used based on signal languages, used by dumb people. A narrative hand gesture recognition technique is the basis of this paper. This consists of a hardware module and software algorithm. In hardware module- The gesture recognition is done using a sensor glove which consists of a microcontroller, accelerometer sensors which are positioned on fingers. Here the glove designing and gesture decoding are studied. The acceleration values of a hand motion are transmitted to microcontroller and these acceleration values in three perpendicular directions are detected by accelerometers. An algorithm of automatic gesture recognition is developed to identify all gestures in a sequence.
Microcontroller based Hand Gesture Recognition System using Flex Sensor for Disabled People

- Arefin Shamsil and Thilakshan McMaster University "Motion Tracking Glove for Human- Machine Interaction: Grasp & Release", 4-23-2010.

Index Terms
Computer Science
Communications
Keywords
Flex Sensor  data Glove  gesture Recognition  Global System For Mobile Communication