1.Introduction

1.1 Motivation

Finger gesture recognition is significant for human-computer interaction. At present, there are various methods for the capture and recognition of finger gestures, such as video signal, image analysis, electromyography (EMG). In the last decade, great progress was made in the area of gesture controlled device. Nod, Blackberry Passport, Kinect, Nimble, Apple's touchpad and Myo are some of the devices that made the major breakthrough in this industry. The aforementioned devices are successfully controlled with the user's hand gestures thanks to integrated sensors such as gyroscope, magnetometer, accelerometer and EMG sensors. Scientists soon came to realise that these devices can help apart from controlling basic functionalities can also assist them in gathering data that will help them develop their own ideas and concepts on various fields. For example, many biomedical applications depend on these devices to support patients to rehabilitate after accidents, and amputees to control prosthetic arms. Myo is a gesture control armband which can fetch among other data, EMG signals.