

## **Automated Conversion of Sinhala Sign Language in to Speech Form**

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This concept would be highly beneficial for people who are not aware of the Sri Lankan sign language. This system will help them to record & interpret signs of audibly handicapped people without any help from the translator. Kinect sensor device was used to obtain static and dynamic movements of hand's fingers. But it must be pointed out that this sensor has less sensitivity for detecting finger movements which are very much related with dynamic signs. When hands moved, it was unable to get the clear boundaries of both hands. Therefore it concluded that this particular system is applicable only for the recognition of long movements of hand signals. The system is implemented using C# programming language and XNA framework. This system records frames of static and dynamic signs. After storing, it recognizes the relevant sign and subsequently transforms that into text and speech. Due to the limited sensing power possessed by the Kinect sensor it can be majorly used for recognition of long movement signals of sign language.

**Keywords:** C# Programming, XNA framework

