要 旨

距離評価による指文字認識

永野 雄士

手話を行う聴覚障害者に対して手話通訳者は少なく, いつも通訳者が同行して通訳してもらうのは難しい. そこで, 手話通訳者が同行しなくても自動でコミュニケーションができれば, より健聴者と聴覚障害者の円滑なコミュニケーションが可能になると思われる.

本研究では, 手話の基本であり, 手話でどう表すか知らない単語や固有名詞, 手話を思い出せない時に用いる指文字に重点を置き, 指文字を認識することを目的とする. まず,2 次元計測ソフトを用いて指文字の動画像を追跡し, 手首に基準点を設けてそこから各々の指先までの距離を求め, 距離三段階評価法により評価する方法をを検討する. 実験では,「あ」・「い」・「う」・「え」・「お」・「て」・「ね」の指文字認識を行い, 認識できることがわかった.

キーワード　指文字,2 次元計測ソフト

Abstract

Finger spelling recognition by distance evaluation

Yuji Nagano

The sign language interpreter is a little, comparing with the hearing impaired who use sign language. And it is difficult for the interpreter to always interpret in proportion to a hearing impaired. Then, it seems that smooth communications of the person with hearing well and the hearing impaired become possible if communications can be done by the automatic operation even if the sign language interpreter doesn't go together. Finger spelling is basic of sign language, word that doesn't know how to express by sign language and proper noun. In this research focusing to the finger spelling used when sign language cannot be recalled, it aims to recognize the finger spelling. First of all, the dynamic scene of finger spelling is followed by using two dimension measurement software. The reference point is installed in the wrist and the distance from the point to each the tip of a finger is calculate. The method evaluated by the evaluation method of three distance stages is examined. It has been showed in the examined to recognize the finger spelling of "a","i", "u","e","o","te"and"ne".

key words Finger spelling,Two dimension measurement software