

Automated posture segmentation in continuous finger spelling recognition

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Abstract: Recognizing continuous finger spelling plays an important role in understanding sign language. There are two major phases in recognizing continuous finger spelling, which are posture segmentation and posture recognition. In the former, a continuous gesture sequence is decomposed into segments, which are then used for the latter to indentify corresponding characters. Among all the segments, beside valid postures corresponding to characters, there are also many movement epentheses, which appear between pairs of postures to move the hands from the end of one posture to the beginning of the next. In this paper, we propose a framework to split a continuous movement sequence into segments as well as to identify valid postures and movement epentheses. By using the velocity and signing rate based filter, we can obtain very good result with both high recall and precision rate. © 2010 IEEE.

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