

Vision-Based Hand Segmentation Techniques for Human-Computer Interaction

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Abstract : This work is the part of vision based hand gesture recognition system for Natural Human Computer Interface. Hand tracking and segmentation are the primary steps for any hand gesture recognition system. The aim of this paper is to develop robust and efficient hand segmentation algorithm such as an input to another system which attempt to bring the HCI performance nearby the human-human interaction, by modeling an intelligent sign language recognition system based on prediction in the context of dialogue between the system (avatar) and the interlocutor. For the purpose of hand segmentation, an overcoming occlusion approach has been proposed for superior results for detection of hand from an image.

Keywords : HCI, sign language recognition, object tracking, hand segmentation

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