

Hand gesture recognition using adaptive network based fuzzy inference system and k-nearest neighbor

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Abstrak

The purpose of the study was to investigate hand gesture recognition. The hand gestures of American Sign Language are divided into three categories—namely, fingers gripped, fingers facing upward, and fingers facing sideways—using the adaptive network-based fuzzy inference system. The goal of the classification was to speed up the recognition process, since the process of recognizing the hand gesture takes a longer time. All pictures in all of the categories were recognized using K-nearest neighbor. The procedure involved taking real-time pictures without any gloves or sensors. The findings of the study show that the best accuracy was obtained when the epochs score was 10. The proposed approach will result in more effective recognition in a short amount of time.