

Lip Event Recognition and Geometric Feature Extraction for Lip Reading System

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A lip reading system is a communication technique used by a hearing person in a conversation. Now and again, the word they understand does not match what the other speaker says. A lip reading system can make them trace these words based on the movements of the lips. Many algorithms and methods are proposed to recognize lip movement and to extract features from the movement of the lip. To recognize the spoken word, lip event detection and feature extraction is need. In this paper, lip event is detected by using a $L^*a^*b^*$ color space method and Moore Neighborhood Algorithm. Then, features are suggested as visual features of the motion of the lip based on geometrical information. The research goal in this study is to recognize lip motion based on modifications in the ellipse surface area. For the experiments, several spoken consonants have been chosen. The accuracy of proposed method is verified by using it to recognize 14 two syllable consonants of Myanmar Language.