

# An Improved ASM-based Facial Feature Locating Method

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## Abstract

The active shape model (ASM) has been successfully applied to locate facial feature points. However, the traditional ASM use a grayscale profile as its feature model without considering the different characteristics of landmarks. We cluster all the landmarks into two groups: the corner landmark group and the edge landmark group. In fact, the edge landmark group is further clustered into two subgroups: the facial contour landmark group and the non-facial contour landmark group. Each landmark group has its own specialized feature model. The feature model of the corner landmark group is constructed by using an Adaboost algorithm, the feature model of the facial contour landmark group is a non-symmetrical cross feature model, and the feature model of the non-facial contour landmark group is a symmetrical cross feature model. Experimental results demonstrate that our proposed method can achieve a better performance than the traditional ASM and it also can run in real time.

Keyword : facial feature point locating, ASM, facial feature model