Universiti Teknologi MARA

Evaluation of Facial Detection Using Adaboost and Morphology

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DECLARATION

I certify that this thesis to which it refers are the product of my own work and that any ideas or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline.

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ABSTRACT

Face detection is a very important process and become part of face recognition. People are slightly aware of its significant and sometimes cannot really determine a face in an image before recognize it. This situation usually happened to the beginner. In recent years, there are a lot of researches on face detection method. Thus, a lot of techniques have been discovered in order to get a better technique and improvement in this area of study. Each of those techniques has its own effectiveness in face detection. For example knowledge based method that able to work well for face localization in uncluttered background. Beside that, there is also another method that has the capability to run in real time such as Adaboost. However, this research is only focusing on two techniques, which are Adaboost and Morphology. Both of these algorithms are capable in face detection but serve up in different way. Thus, the objective of this research is to evaluate face detection tool using Adaboost and Morphology and to find out the effectiveness of both algorithms. The system that has been used to test the images is Kihwan's Face Detector. Analysis shows that this system is good in detecting large size images using Adaboost. After sizes of the images have been standardizing to become 400 x 300 pixels, it shows that this system can performs better by using Morphology as the technique.

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