

**UNIVERSITI TEKNOLOGI MARA**

**EXTRACTING FEATURE FROM  
IMAGES BY USING K-MEANS  
CLUSTERING ALGORITHM**

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## **STUDENT'S DECLARATION**

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

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## **ABSTRACT**

Image segmentation refers to process of separating out a desire region from an image. Extracting feature in images to get meaningful information is a demanding task as need to extract the information in very large images. However, existing face recognition methods would not perform well under certain conditions. This research purposed clustering algorithm to improve process extracting feature in images to get meaningful information because it can speed up the time to process of extracting meaningful information in images due to the efficient of the algorithm that has high performance to process the image. This research scope are to develop a computer application that can extract meaningful information in images by implement K-Means clustering algorithm. 10 self capture facial image will be use as the research subject to test the algorithm that will extracting meaningful information of the person. For this research, the meaningful information that will be extracting is eye feature. Methodology of this research consists of Planning and Analysis, Data Collection, Algorithm Design and Development and Testing. All the process in developing the prototype will be reveal later in this report. The result of this research show that nearly all image has accuracy more than 80% that prove that K-Means clustering algorithm are suitable as method for extracting meaningful information in images.

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