

CONTENT-BASED IMAGE RETRIEVAL USING EXPRESSION SENSITIVITY BY FUZZY INFERENCE SYSTEM

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Abstract

Image retrieval can be divided into two types context-based and the content-based. Image retrieval based on the content refers to the image features such as color, texture, shape, semantics or sensations. This paper addresses the content-base image retrieval system based on expression sensitivity. It can be image or text query for input the system. Based on Itten theory, expression sensitivity consist of warm, cold, relax, anxious, and life. The research system uses two fuzzy inference system. Firstly, fuzzy inference system is used to decide image region of color. The image size is 256 x 256 pixel. Output the first fuzzy inference system is input for the second fuzzy inference system. The second fuzzy inference system is used to determined expression sensitivity of image. Degree of accuracy based on respondent from 50 images and 20 respondents is 42% for text query and 55% for image query. The further research, it can be used for other image such as medical image with certain criteria.

Keywords : Content-Base Image Retrieval, Expression Sensitivity of Image