An adult image identification system employing image retrieval technique 石昭玲,李建興,楊長慎 Computer Science & Information Engineering Computer Science and Informatics sjl@chu.edu.tw

## Abstract

As the development of the Internet, children are easily exposed on the pornography through web browsers. To block adult images, content-based image retrieval technique is employed for adult image identification. First, the background is removed to obtain the rect- angular region of interesting based on the detection of skin-like pixels. For each input image, the MPEG-7' s color, texture, and the pro- posed shape feature is used to retrieve 100 most similar images from the image database which contains both adult and non-adult images. If the retrieved images contains more than Tad adult images, the input one is identified as an adult image. Otherwise, it is identified as a non-adult image. Experiment results have shown the effectiveness of the proposed method. 2007 Elsevier B.V. All rights reserved.

Keyword: Adult image identification; Scalable color descriptor; Edge histogram descriptor