Automatic recognition of blood marks at accident scene

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ABSTRACT

Image processing, especially for pattern recognition, has played an important role in a wide variety of applications, such as biometrics, security monitoring system, and medical image due to its great advance in technology during the past decades. The use of blood-like spots in an image to identify the responsibility of drives in a traffic accident may often lead to some controversies due to the fact that the blood-like spots may be not true ones. In this thesis, we propose an automatic blood marks identification system to help forensic officers to identify whether the spots are blood marks or not. In this work, YC'gC'r color space is first applied to extract blood-like areas. Then, morphological image processing and followed fast 8-connected method are used to segment the blood-like spots from its background. Finally, the method of grey level Co-occurrence Matrix matrix (GLCM) is exploited to determine the true blood marks from the candidates. Experimental results confirm the superiority of the proposed method.

Keywords : Color segmentation　Blood spots detection　Blood marks recognition

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