Determining Firm Logos Using Image Processing Techniques on a Mobile Device to Aid Blind People

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ABSTRACT

Many firms associate their brand name with a logo. Thus, customers can face logos and easily recognize the brands without reading their names. Using this strong relationship, we introduce a logo recognition system useful to the blind people. In the proposed system, blind or visually impaired people can use their smart phones as a video recorder in a shopping mall food court to identify the shops around them. The mobile application running on the device captures the frames and analyses them to identify any logos. The identified logo is read to the user. In this paper, we propose a practical yet successful image processing algorithm to enable such a mobile application work on. The initial experiments on sample videos indicate promising results.

Keywords - image processing, blind, logo recognition, logo detection