

A Real-Time Character Recognition System

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ABSTRACT

This report is about developing a real time character recognition system. The system is designed to work with natural scene image sequences as opposed to images taken in a environment where lighting and surroundings are controlled. Two main approaches were taken for text detection, one is using various image enhancement techniques to extract text from the background, and the other is using maximally stable extremal regions to find areas of the image that contain text. The first method was found to be very fast but did not have accurate results whereas the second method was very robust but too computationally expensive to use for video.



Figure 4. Maximally stable extremal regions



Figure 5. Detected text using MSER

filtering

R Surendralal, A Real-Time Character Recognition System, *Proc. 13th School Conf. for Annual Research Projects*, University of Reading, 3rd June 2016.