

# Character Extraction of Engineering Drawing Images Based on Projection Schemes

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## ABSTRACT

In everyday life, character extraction are common. Such as indicators of roadside billboards, magazines are printed with text. Text is always a mixture of pictures and designs on these items. To identify and extract these objects are important issue for the image process. This thesis presents the study of character extraction of engineering drawing images based on projection schemes. First to look for the horizon line is greater than the threshold, and record the sum of Horizontal projection pixel values, and then set a threshold to filter out unwanted horizontal lines. Second to look for the vertical line is greater than the threshold, and record the sum of vertical projection pixel values, and then set a threshold to filter out unwanted vertical lines. After filtration, we find the horizontal and vertical line to do a logical OR operation to combine. And then do the median filter to remove some noise, and to complete the character extraction results. And do a logical XOR operation with original image to complete the line extraction. This method can find out the position of the characters and line of engineering drawing images.

Keywords : Engineering drawing images、Character extraction、Projection

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