Abstract

SOMYOS CHINDAPOL : RECOGNITION OF MULTIPLE - FONT THAI CHARACTERS
PRINTED IN SENTENCES.

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In this thesis, the recognition of multiple-font Thai characters printed in sentences is described. The black-pixel distribution in vertical and horizontal of bitmap-picture is used to specify lines and to segment characters. Because Thai characters have complicated structures and many similar curves, the method based on the structural analysis of their contour is proposed. In the thesis, Freeman chain code and differences of contour tracing are utilized to extract concavities and convexities of character contours. Simple features of arc, such as length between adjacent + and − vertices are utilized to calculate the distance between each arc pair of an input character and a model character in the Dynamic Programming matching process. The most similar arc pair is detected between an input character and a model, and it is used to determine the matching of the next arc pairs. Then, the distance between each arc pair are calculated and used to define the similarity between characters.

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