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The Implementation of the Javanese Lettered-Manuscript Image Preprocessing Stage Model on the Batak Lettered-Manuscript Image

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Abstract : This paper presents the results of a study to test whether the Javanese character manuscript image preprocessing model that have been more widely applied, can also be applied to segment of the Batak characters manuscripts. The treatment process begins by converting the input image into a binary image. After the binary image is cleaned of noise, then the segmentation lines using projection profile is conducted. If unclear histogram projection is found, then the smoothing process before production indexes line segments is conducted. For each line image which has been produced, then the segmentation scripts in the line is applied, with regard of the connectivity between pixels which making up the letters that there is no characters are truncated. From the results of manuscript preprocessing system prototype testing, it is obtained the information about the system truth percentage value on pieces of Pustaka Batak Podani Ma AjiMamisinon manuscript ranged from 65% to 87.68% with a confidence level of 95%. The value indicates the truth percentage shown the initial processing model in Javanese characters manuscript image can be applied also to the image of the Batak characters manuscript.

Keywords : connected component, preprocessing, manuscript image, projection profiles
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