

Abstract

Mobile devices, especially smartphones now have a very complete feature. One of the features that can be implemented on a smartphone is Optical Character Recognition (OCR). OCR is able to extract the posts in an image into digital data in the form of text data. The results of the OCR process is carried out on smartphones still have less than the maximum results if not through a pre-processing stage.

Processes such as global thresholding binarization by Otsu method is less able to produce the corresponding binary image, while such Niblack local thresholding or Sauvola has high computational time

The results of the addition preprocessing with binerisasi using mixed binarization, especially OCR performance increased 62.11% accuracy compared to the process without the use of pre-processing and increased by 12.14% compared to just using Otsu method.

Keywords: OCR, binarization, pre-processing, mixed, acuraccy, computation time