Abstract

On today's mobile devices especially smartphones have the ability to run features more complete, it is supported by the accompanying hardware. One feature that can be applied to smartphones is OCR. OCR recognizes text on image and translates it into digital data in the form of text data. Performance OCR system implemented on mobile devices is still low if not through the preprocessing stage. By adding a binarization preprocessing using Sauvola method, OCR performance especially the accuracy expected to increase. Sauvola method has a higher computing time caused by threshold calculation computes locally. At the threshold calculation added Integral Image method to decreases the computational time of binarization process. Results of OCR system performance through binarization preprocessing using Sauvola method increased the accuracy. Sauvola binarization computational time is decreased by using Integral Image.

Key Word *: OCR, preprocessing, binarization, Sauvola, Integral Image, threshold, accuracy, computational time*