

## PENGENALAN CITRA DOKUMEN SASTRA JAWA: KONSEP DAN IMPLEMENTASINYA

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### INTISARI

Di Yogyakarta masih banyak dapat ditemukan naskah-naskah kuno yang merupakan warisan budaya yang tak ternilai harganya. Maka Apabila naskah-naskah tersebut dapat dikonversikan ke dalam format digital, akan banyak manfaat yang bisa diraih.

Penelitian ini mencoba untuk membuat sebuah prototipe sistem pengenalan citra dokumen sastra Jawa. Data masukan untuk sistem diperoleh dari hasil pembacaan dokumen sastra Jawa dengan alat optis, yang kemudian disimpan sebagai file gambar dengan format \*.jpg. Selanjutnya dengan mempergunakan berbagai metode untuk pengolahan citra, diperoleh citra karakter Jawa pembentuk citra dokumen masukan. Dengan mempergunakan histogram untuk piksel yang berwarna hitam diperoleh ciri untuk setiap karakter. Ciri ini kemudian disimpan dalam basis data karakter Jawa, untuk kemudian ciri ini dipakai dalam pencocokan ciri apabila terdapat masukan karakter Jawa. Dengan mempergunakan jarak Euclidean akan diperoleh nama-nama Latin setiap karakter Jawa pembentuk citra dokumen.

Dari hasil penelitian menunjukkan bahwa untuk mengenal citra dokumen sastra Jawa, dalam hal ini dokumen “Menak Sorangan I, Bab I, Halaman 3 dan 4” diperoleh prosentase keberhasilan pengenalan sebesar 86.53%. Maka dapat disimpulkan bahwa pemilihan metode-metode yang dipergunakan dalam tahap pengenalan citra dokumen pada penelitian ini relatif sudah baik.

Keyword: *Citra dokumen, normalisasi orientasi, binarisasi, noise, perangkaan, segmentasi, pengenalan karakter, ekstraksi ciri.*

**DOCUMENT IMAGE RECOGNITION OF JAVANESE LITERATURE:****CONCEPTS AND IMPLEMENTATION**

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**ABSTRACT**

In Yogyakarta still often could be found the old texts that were the cultural inheritance that was not appraised him. Then if these texts could be converted in the digital format, would many benefits that could be gained.

This research tried to make a prototype of the document image recognition system to the Javanese literature. The input data was for the system received from results of Javanese reading of the literature document with the implement optic, that afterwards was kept as file the picture with the format \*. Jpg. Further by utilizing various methods for the processing of the image, was received by the Javanese character image the framer of the image of the input document. By counting the number pixel the object in each unit from a character image was received by the characteristics of this image. These characteristics were afterwards kept in the Javanese character database, during afterwards these characteristics were used in the verification of the characteristics if being gotten by Javanese character input. By utilizing the modification of the Euclidean distance will be received by the Latin names of each Javanese character the framer of the document image.

From results of the research showed that to know the Javanese image of the literature document, in this case the Menak Sorangan I document and the Panji Sekar document the Map in the page 3 and 4, was received by the percentage of the success of the introduction as big as 86.53%. Then could be concluded that the election of methods that was utilized in the introductory stage to the document image in this research was relative has been good.

Key Word: *document image recognition, image processing.*