Abstract

Sundanese script is a written that was used by the Sundanese tribe in writing Sundanese language used to convey the ideas, feelings and thoughts that were recorded by means of language and script. In order to preserve the Sundanese script in this era, West Java Government register the Unicode of Sundanese script, so that Sundanese script can be known in the world of information technology. Once Unicode registered, it would require a standard font for the Sundanese script. Many of the benefits gained from using a standard font characters Sunda, one of them is for *Optical Character Recognition* (OCR).

In this thesis OCR system to recognize printed sunda script which using standard fonts is built, using the Modified Directional *Feature* (MDF) for extracting the *feature* of character to be recognized, and use Artificial Neural *Network Radial Basis Function* (RBF) in its recognition. Moreover, in this thesis a segmentation method to separate the Sundanese script which using standard fonts is built.

From the results of experiments conducted, it is known that the segmentation method which built can separate the Sundanese script well, beside that MDF can extract *features* well, so that the *classifier* which constructed by using a *Radial Basis Function* can recognize Sundanese script with high accuracy, reached 95,9% for data *testing* and 96,5% for data training.

Keyword: OCR, Sundanese Script, Segmentation, MDF, RBFN