

Abstract

The Study of Handwritten Japanese Kanji Character Recognition has been a challenging problem since 1980s. Lot of research has been done and a various results have reported. One reason that gains people's interest in research and related research conducted handwritten character recognition is due to Japanese characters uniqueness that don't use Latin script as in other countries in general. But the main difficulty in this research is that there are large variations in different handwriting style for each people.

This final project is intended to present a new variation in the recognition of handwritten Japanese characters. Because the total number and type of Japanese characters are too much, so this final project is limited only to use Kanji characters as input.

This system will do the recognition of the Japanese kanji characters. The input will be an image of handwritten Japanese Kanji characters, that characters are then scanned and processed immediately. Firstly, the system will do the preprocessing of the input image performed using the Alternative Nonlinear Normalization and then feature extraction will be using the Directional Decomposition Cellular Features. Output the desired from the input character of Kanji recognition is system accuracy and the way its read in Latin letters as well as translation in Indonesian. This system will be implemented as a whole entirety using MATLAB R2009a.

Keywords: Handwriting Character, Japanese Kanji, Alternative Nonlinear Normalization, Directional Decomposition Cellular Features