IDENTIFICATION OF BENGKALIS WEAVING PATTERNS USING CONVOLUTIONAL NEURAL NETWORK METHOD

Name   : Jasa armansyah

Nim   : 6304211363

Supervisor   : Ryci Rahmatil Fiska, M.Kom

ABSTRACT

Bengkalis woven fabrics feature a variety of designs with deep philosophical meanings. The problem of this research is that people, especially the younger generation, do not understand how to recognize patterns on Bengkalis woven fabrics. The purpose of this research is to Convolutional Neural Networks (CNN) to identify 8 Bengkalis weaving patterns: bungo mawar, bungo cengkih, pucuk rebung, siku awan, siku keluang, siku keluang bungo, Teratai pecah lapan, and tampuk manggis, to create a model to identify Bengkalis weaving patterns, datasets obtained through the intrrenet and weaving craftsmen are used to train CNN models, the results of cnn models that have been trained will then be integrated into mobile devices through the flask backend api, the CNN model developed is tested to evaluate the accuracy performance in classifying these patterns. The results showed that the CNN method was able to recognize and classify weaving patterns with an accuracy of 85%, so that it can be an effective solution in the automatic identification of Bengkalis weaving motifs.

Keywords*: Bengkalis Woven Fabric, Convolutional Neural Network (CNN), Pattern Identification, Cultural Heritage.*