ABSTRACT

Data processing based on digital image processing can be applied to final score student

input system in IT Telkom. Input system of final score that used by the institution are based on

web. Teachers of certain subjects enter score data into the database of institution the in a way to

log into the specific web, after that teachers manually enter the score data into a web according

to the name and NIM students.

In this final project has been designed a realtime system that is able to recap on the final

score of students based on webcam by reading the image from the sheet of students score data

who are generally the score are handwritten. Score form sheet, in this research, will be

redesigned which contains information about courses, classes and lectures. System that is

designed in this final project perform pattern recognition for all letters and numbers from printed

character and also letters A, B, C, D, E, and T from handwritten characters. Classification

method that is used is the K-Nearest Neighbor (K-NN) for printed character and correlation

factor for handwriting character

This system perform recapitulation with the accuracy reached to 95% with normalization

segmented image into 30x20 pixels. The average computation time for one image of the value

lasts for 3.55 seconds.

Keyword: Digital Image Processing, K-NN, correlation factor, Normalisation, Realtime and

Webcam