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*