

## ABSTRACT

Paper is an item that is widely used in the world of formal education. One example is used to write the note from the lessons given by the teacher during the teaching and learning activities. The usefulness of the paper for the note only temporary. After useless, the paper becomes waste that can harm the environment. In addition, the raw material for making paper is a tree. If more paper is used, then the felling of trees will also be getting a lot done. This will make the forest bare and increase the risk of global warming.

In this final project has created an android application with handwriting recognition feature on the mini computer. Android was chosen for being a smart phone operating system that is widely used by many people. Besides Android also is open source, meaning users are exempted in creating, executing, or modifying the program. This system will make recognition to letters and characters entered by the user on the image area. The recognition results can be saved in a text file. The file will then be used as a note by the user.

From the results of testing with downsample dimensional parameter values obtained the highest accuracy in dimensions 7x7, amounting to 96.2% for the number, 94.69% to lowercase, and 91.30% for uppcase. From the results of testing with the amount of training data parameter values obtained the highest accuracy on the amount of training data 1, amounting to 96.8% for the number, 91.53% to lowercase, and 91.23% to uppcase. With this application, the students do not require a lot of paper in terms of log-recording or processing tasks (paperless).

**Keywords:** Minicomputer, android, handwriting recognition, paperless