ABSTRACT

Braille is a form of writing with a raised round mark which being used by blind people. Still, in this information technology development era, Braille script is processed manually, whether in the translation, editing, or printing stage. Certainly, it cost a lot of time and exhausting.

This final assignment will implement single-sided Braille script optical recognition technique using a simple image-processing algorithm, mesh determination method. The concept of this system is transforming a Braille script into a digital image form (Bitmap or JPEG file) by scanner, then translating the digital image into text file form (ASCII). Furthermore, the file will be kept in this form. Hopefully, Braille processing will be easier using this system.

This research built using Borland Delphi7. The experimen show that maximum accuracy of conversion system is 100% and 99.12% for minimum accuracy of conversion system. Hopefully, Braille processing will be easier using this system.

Keywords: Braille, mesh determination, digital image, single-sided, ASCII.