

## **ABSTRACT**

Computer Vision is one of the emerging field of research today. Computer Vision is the core of how a machine capable of interpreting an object. Currently, the use of computers has reached many aspects of life. Education sector for example, computers have been used to correct the student exam results. Computer-based tools used for this purpose is the Mark Reader. This tool LJK move into digital files and then process them to get the exam results of students who filled in the LJK.

This final project intends to build as Mark Reader system based on digital image processing. The system built the capability to process the digital image to extract the identity, answers, and other data in the LJK then compile that information so it can be easily interpreted by the operator. The final result expected is that the use of Mark Reader can be replaced with a system that will be made in this final.

In this final project done a few scenarios to test the performance of the system, the scenario is a threshold effect area, double shaded effect, effect of orientation image correction LJK and accuracy of the answer. Through several scenarios were obtained accuracy of this system is 100%.

**Keyword:** LJK, Mark Reader, Morphologi Analysis, Image Segmentation, Registration LJK