

## ABSTRACT

*The current technological developments make the interaction between humans and machines more often. The machine is very helpful in fulfillment the human needs. But there are still few machines that can recognize human emotions and processing the recognition results. Therefore it is necessary to do more research on emotional recognition.*

*In this final project built a system that will recognize six types of Emotion, that is surprised, sad, happy, angry, scared, and disgusted. There are three stages, Namely facial segmentation, feature extraction, and emotional classification. At the emotional classification stage, it will use the Learning Vector Quantization algorithm (LVQ).*

*The result of test, it got the percentage of accuracy value of training data equal to 66,67% and percentage of accuracy value of test data equal to 40% using parameter 100 PC, learning rate 0.08 and 40 epoch.*

*Keywords :Face Detection, Feature Extraction, Expression Classification, Learning Vector Quantization*