## **ABSTRACT**

Face recognition become one field of image processing most studied by several researchers in past years. The difficulty of the machine to perform human face recognition is also the reason that has been a lot of research. Machine is very different from human brain that easily recognize a person's face with ease system is required to recognize a human face which different from the face that has been drilled due to a change in people's faces. That condition due to aging, expression and even the addition of accessories.

In face recognition there is one method that is local feature systems take a small part of the face and put it into descriptor. Local features its own method widely studied because these types method is more robust to illumination(different of light). One type of method that uses the local features in LGSP(Local Gaussian Structural Pattern). LGSP considered to be robust against noise appearing in the picture. Successful rate using Local Gaussian Structural Pattern algorithm and classification algorithm Support Vector Machine in this research is 65.78%.

Keyword: Face recognition, feature extraction, feature classification, Local Gaussian Structural Pattern