

# **ROOM SAFETY SYSTEM USING FACE RECOGNITION WITH VIOLA JONES METHOD**

**MUHAMMAD YULIANTO**

*Informatics Study Program, Faculty of Science & Technology*

*University of Technology Yogyakarta*

*Jl. Ringroad Utara Jombor Sleman Yogyakarta*

*E-mail : [myemwaii@gmail.com](mailto:myemwaii@gmail.com)*

## **ABSTRACT**

*The era of increasingly advanced technology encourages enormous changes in various areas of life. Computers, one of the supporting tools to help human work in the era of technology, have begun to follow the human mindset to reduce the gap between humans and computers. There are various kinds of interactions that computers can do to help human work, one of which is facial recognition. Face recognition is a branch of science in the field of computer vision. Before recognizing a person's face, the computer will detect the face first. However, to recognize a person's face is not as easy as a human who can immediately recognize a person's face, there are many computations carried out by computers to recognize a person's face. Many researchers began to make various methods to speed up and improve accuracy in recognizing human faces. One method that can detect and recognize faces is the viola-jones method. Standard methods are used to detect faces and can be used to recognize faces. The viola jones method itself has stages in detecting faces from integral images, haar-like features, adaboost classifier, and cascade classifier which makes it a good method not inferior to other methods.*

*Keywords: Face, Viola Jones Algorithm, Face Recognition, Computer Vision*