ABSTRACT

Every human being has abundance and weakness in his life. Sometimes to be accepted by the community, someone will try to cover up the shortcomings or even the excess by lying. In fact, lies will cause profit on one side and loss on the other.

In this final project has made a system to detect lies with eyeball movement analysis and the number of blinks using the Viola-Jones method. According to psychological theory, if someone's eyes tend to face the left, this is because they are thinking about things that have happened before, according to the function of the left brain as a past memory. While the gaze of someone who tends to face the right side is related to the right brain or imagination. While the average adult blinks is 10-15 times in one minute and takes a pause between 2-10 seconds between a blink and the next blink.

The two parameters in the system that are made will be combined with the Backpropagation method to predict the lies, where the accuracy is 85.33%.

Keywords : *Lie Detector, Eyeball Movement, Blinking, Viola-Jones, Facial Landmark, Backpropagation Neural Network*