

## **ABSTRACT**

*Amyotrophic Lateral Sclerosis (ALS) is an illness due to lack of nourishment in human motoric nerves. This illness causes the sufferer a loss in motorical movement. Thankfully there is still an organ that move well regardless the illness, and that is eye movement.*

*Eye tracking method have been applied to controlling computer. Majority of eye tracking methods are divided to two methods, the first is videooculography (VOG), and the second is electrooculography (EOG). VOG used camera as video recorder so that the video could be processed using image processing track eye movement. EOG used skin electrode that were usually used in electrocardiography, which could detect ion exchange on the back of eye, around retina. Signals were amplified, filtered, and conditioned in electrooculograph sensor.*

*The principle in this research is to design a cursor controlling system using EOG sensor and classified the signal using simple thresholding method. The result would be cursor movement based on eye movement.*

*Purpose of this final assignment is to design a cursor controlling system based EOG sensor to enable the disabled use computer with their dissabilities.*

**Keyword:** *electrooculograph, thresholding, cursor computer, disability.*