

ABSTRACT

EOG (Electrooculography) is a technique that capable of recording electrical signals in the eye. Through this device, biopotential signal converted into the form of an electrical signal. In this final project designed a prototype of a communication tool utilizing EOG, the signal classification method based on the magnitude. Where in the signal processing using amplification and strengthening of EOG module itself. Results of the signal processing will be represented in the virtual keyboard. It consists of a virtual alphabet keys that will be visualized in writing. The prototype of communication tool, it's can be utilized for patients who suffer from neural disease, such as stroke. This prototype has an accuracy rate of 76% for righ eye movementt, while left eye movement, it has an accuracy of 73%.

Keywords: EOG, Neural Disease, Classification Signal, Virtual Keyboard.