

351. ANALYSIS OF EEG DURING MOTOR IMAGERY

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This paper is aimed to analyze the EEG signal during motor imagery movement of human hands by using the concept called Brain-Computer Interface (BCI). EEG acquisition and analysis system is developed in this work. The ultimate goal of the work is to determine the motor imagery movements of human hands by using the changes in Mu band (8-13 Hz) EEG. The Electroencephalogram (EEG) is a representative signal that contains information about the condition of the brain. The EEG signals are acquired and filtered to extract Mu(μ) band EEG. Features such as mean of Mu band and band powers are calculated. The developed EEG-based brain-computer interface classifies the two types of hand movement imagery (such as imagination of left hand and right-hand) using the Mean of Mu band and Band power.

Keywords—EEG; Brain-Computer Interface; Mu band EEG.