# IDENTIFIKASI SINYAL *ELEKTRODE ENCHEPALO GRAPH* UNTUK MENGGERAKKAN KURSOR MENGGUNAKAN TEKNIK *SAMPLING* DAN JARINGAN SYARAF TIRUAN

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***Abstract***

*This paper describe the application of backpropagation neural networks as classification and sampling technique (ST) for the extraction of features from the signal wave Electro Encephalo Graph (EEG). This research aims to develop a system that can recognize the EEG signal that is used to move the cursor. The data used is the EEG data which is IIIA dataset of BCI competition III (BCI Competition III 2003). This data contains data from three subjects: K3b, K6b and L1b. In this study, EEG signal data separated by the imagination of movement to the left, right, leg movements and tongue movements. Decision making has been carried out in two stages. In the first stage, TS is used to extract features from EEG signal data. This feature is as basic inputs in back propagation neural networks as a process of learning. This research used Back Propagation (20-20-10-5-1) and 90 data files EEG signal for the training process. During the identification process into four classes of EEG signal data files data files plus 60 into 150 EEG signal so that the EEG signal data file. The results obtained for the classification of these signals is 80% of the 150 files examined data signal to the process of mapping.*

*Key words: Sampling Techniques, Back Propagation, EEG Signals.*