عنوان مقاله:

Provides a Method for Detecting Left and Right Hand Movement Imaginations in the Brain by Using Electroencephalogram Signal and LinearPropagation Coefficients (LPC) for Mel-Frequency Cepstral

محل انتشار:

سومین همایش بین المللی التهاب سیستم عصبی و سومین فستیوال دانشجویی علوم اعصاب (سال: 1398)

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خلاصه مقاله:

The human brain is a very vital member of the body and controls the behavior and movement of the body. In this study, a method for classifying electron-phonogram signals based on neural network is presented. The first stage of the electroencephalogram signal is recorded. For this purpose, the BCI competition II database is used and the data set number 3 is used. In the second stage (7-13), signals are pre-processed and filtered appropriately. In the third stage, the alpha and beta band signal (13 to 30 Hz) are extracted. In the fourthstage, the signal of the linear predictor coefficients of the Mel-frequency cepstral is derived. In the fifth step, the classification is performed by using a Support vector machine (SVM) classifier and the K nearest neighbors algorithm (K-NN). Conclusion: The best results fromsplitting Movement imagery for a support vector machine with a sensitivity of 92.88% are obtained.

کلمات کلیدی:

لینک ثابت مقاله در پایگاه سیویلیکا:

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