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Emotion identification by dynamic entropy and ensemble learning from electroencephalogram signals

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Abstract

Emotions are biologically based psychological states brought on by neurophysiologic changes, variously associated with thoughts, feelings, behavioral responses, and a degree of pleasure or displeasure. In order to assure active collaboration and trigger appropriate emotional input, accurate identification of human emotions is important. Poor generalization capacity induced by individual variations in emotion perceptions is indeed a concern in the current methods of emotion recognition. This work proposes a new dynamic pattern learning system based on entropy to allow electroencephalogram (EEG) signals for subject-independent emotion recognition with strong generalization