

عنوان مقاله:

fMRI Brain Decoding of Facial Expressions Based on Multi-voxel Pattern Analysis

محل انتشار:

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خلاصه مقاله:

In a brain decoding study, using the functional magnetic resonance imaging (fMRI) data we determined the facial expression of the visual stimulus that the subject perceived. fMRI data acquired from a healthy right-handed adult volunteer who participated in three separate sessions. Participant viewed blocks of emotionally expressive faces alternating with blocks of neutral faces and scrambled images. Multi-voxel pattern analyses are then used to decode different expressions using the activity pattern of most active parts of brain. We used multi-class support vector machine (SVM) to distinct five brain states corresponding to neutral, happy, sad, angry and surprised. Results show .that these facial expressions can be classified from fMRI data with the average sensitivity of 90 percent

کلمات کلیدی:

Brain decoding, facial expressions, Multi-voxel pattern analysis, Support vector machines

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