

عنوان مقاله:

A new Era of communications: BCI Problems and Usecases

محل انتشار:

سومین کنفرانس بین المللی مکانیک، مهندسی برق و کامپیوتر (سال: 1399)

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خلاصه مقاله:

The Brain-Computer Interface (BCI) is a powerful tool for communication between users and systems that improves the human brain's ability to directly communicate and interact with the environment. In recent decades, advances in neuroscience and computer science have led to exciting BCI innovations, making BCI a top interdisciplinary field of study in computational neuroscience and intelligence. This technology can be used by disabled people to improve their independence and maximize their capabilities such as finding an object in the environment. The non-invasive measurement of cortex information by electroencephalography (EEG) can be accomplished by such instruments. (BCI) is often directed at mapping, assisting, or repairing human cognitive or sensory-motor functions. No external devices or muscle intervention are needed by BCI to issue commands and complete the interaction. BCI's promising future has inspired the scientific community to investigate BCI's role in the lives of non-paralyzed people through medical applications. Brain-computer Interface systems base their functionality on either observing the state of the user or enabling the user to deliver his/her ideas.

کلمات کلیدی:

BCI, EEG, Machine learning, Brain

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