Brain Computer Interface using Deep Learning

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Abstract: *Human-generated thoughts and signals are non-stationary and nonlinear due to the complexity of the human brain. Therefore, the difficult part is to create a system that can extract deeper insights from the human brain. Once these deeper insights are obtained, BCI applications will function more effectively. Devices known as brain-computer interfaces allow its users to communicate with computers only through their brain activity, which is often detected by electroencephalography (EEG). The use of deep learning in brain computer interfaces (BCIs) is investigated in this work. Reviewing previous research and findings on brain computer interfaces (BCIs) and how they work with deep learning methods is the main goal of the study. It looks at how signal processing, feature extraction, and classification in BCIs have been improved via the use of deep learning. The goal of the research is to present a thorough review of the state of innovations and improvements in this sector as of right now. illuminating the possible advantages and difficulties of using deep learning to BCIs*

Keywords: deep learning, computer, brain language, EEG, and brain-computer interface

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