

Electroencephalography (EEG) based control in assistive mobile robots: A review

Abstract

Recently, EEG based control in assistive robot usage has been gradually increasing in the area of biomedical field for giving quality and stress free life for disabled and elderly people. This study reviews the deployment of EEG based control in assistive robots, especially for those who in need and neurologically disabled. The main objective of this paper is to describe the methods used for (i) EEG data acquisition and signal preprocessing, (ii) feature extraction and (iii) signal classification methods. Besides that, this study presents the specific research challenges in the designing of these control systems and future research directions.