MIND-MACHINE INTERFACE: ITS IMPLEMENTATION AND APPLICATIONS IN REAL FIELD

PARAMITA SEN¹ AND A.B. BHATTACHARYA²

Brain-computer interface is a communication system, independent on the brain's normal output pathways of peripheral nerves and muscles. Applications of BCI depend on its functionality by recording the brain waves and sending the same to the computer system for completing the intended task. BCI has now entered the world of healthy people for a physiological measuring tool which successfully retrieves and uses information about individual's emotional or cognitive state. In the present paper we have emphasized the application areas which are benefitted from brain waves including major usability and technical challenges. BCIs have, in recent years, contributed in a wide area of research and thus have emerged as a wide spectrum of applications in healthcare field taking advantage of brain signals in different phases like detection, diagnosis, prevention, rehabilitation and restoration.

VOL. 85, NOS. 11–12