

Brain Machine Interfacing Technology

Introduction

Just imagine, *At the end of a busy day, you are sitting on the sofa and you need a hot cup of tea...* You just thought for a cup of tea, and it step to you! Don't think me a mad or I'm not joking! This impossible thing can be possible by the help of BMI or Brain Machine Interfacing Technology!

What Is It?

Brain Machine Interfacing is such a technology, by using which a device can work by taking Neural Signal from a human brain! Especially it's being designed for those patients who are severely paralyzed! Basically scientists are designing this technology for severely paralyzed patients that they can react with the world as a normal human being!

Base of BMI

When any part of our body gets paralyzed, all the sensors of that part get disconnected from our brain! Means, if our brain sends a signal to that particular paralyzed part of our body, it is unable to get that signal, BMI works here! Its main purpose is to take and understand those signals, analyze it and then sending it to that part of our body! By using this system, user can move cursor on the computer screen also! But these all are imaginations! To do it in real, all the scientists of IEEE and others are in experiment!

Signal Acquiring

In this case two type of technology used! 1) Non-invasive and 2) Invasive
For Non-invasive electrode are placed on the scalp to acquire signal and for the second one micro electrode are pushed into the central position of brain. In this case signal quality is too good because invasive electrode collects signals for each and every neuron separately whether Non-invasive electrode collects signal from the outer surface of brain. But in case of Invasive the electrode surgery bar used may cause damage of brain! That is why scientists are working more with non-invasive technology in place of invasive one!

Size of BMI

Scientists of Pittsburg have discovered a BMI which is as smaller as a Aspirin! It is named as Brain Gate. Brain Gate has successfully worked on a monkey and the on a paralytic patient of age 25! By using this BMI, the patient was successful to change TV channel, reading e-mails, switching on-off the fan etc.

At Last...

This was a little bit about BMI Technology! It has no doubt that it will be very helpful for those paralyzed patients but don't know *how much it will be helpful for a normal human being!*

References

For More Information On Brain Gate Please Visit: <http://www.gizmag.com/go/3503/>

Source: Some News Paper and Internet, I'm Not A Professional, So Don't Ask Me Any Question About BMI, I Just Liked It and Wrote It For Those Who Are Fully Unknown To BMI!

Source: <http://www.go4expert.com/articles/brain-machine-interfacing-technology-t20186/>