

Informatics Institute of Technology

In collaboration with

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**Detection of Changes in attention of students
By analyzing EEG result
Using Artificial Intelligence**

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Abstract

Student Attention is a major problem in modern education sector. Most of the teachers and parents are not satisfied of their students' attention at all. During the schools, universities and any kind of education platform there are different kind of students who pay attention and not paying attention. Teachers/Lecturers always try to get attention to their students, also they know it is very hard to get attention when it becomes a traditional classroom. Teachers/lecturers are using some simple methods to keep students' attention, but most of them are not working at all. Because one student is different from other one. Most of the students are acting like they have pay attention but their minds are away. If there are any possibility to monitor the attention level of the student, then Techers/ Lecturers certainly can improve their students.

In this research, an attempt was made to monitor EEG signals of student attention sessions like during class rooms with ANN technology. The proposed solution has the ability to collect the EEG data from people who has expert attention skills like meditators which has been used to train the ANN. After that EEG signal of the people who need to check their attention abilities like students were given as the input to trained ANN for classification which output whether attention is good or need to improve. EEG device has been used to collect the EEG data in non-invasive method It sends data via Bluetooth.

The main aim of this project is to design and develop an approach to detect the level of student attention and in additionally find a solution for that.

Keywords

Electroencephalography

Artificial intelligence

Machine Learning

Cognitive