AN ARTICLE ON IMPLEMENTATION OF AIML IN COLLEGE EDUCATION

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Abstract: Artificial intelligence (AI) is used in many fields such as in advertising, online shopping, cars etc., In everyday life the AI is used such as applications like Google maps and also Waze which are used for analyzing traffic data in live and also provides the fastest route for the user to drive. Now- a-days the AI is also evolved in education. By adapting the AI, it can transform the classical way of learning and teaching to a modern way called as digital transformation. The aim of this article is to make a study on how AIML can be useful, if it is implemented in higher education such as in colleges or universities.

Index Terms – College education, Machine learning, Artificial intelligence

I. INTRODUCTION

Now-a-days the AI software is grown rapidly not only in E-commerce, but also in other fields such as health care, manufacturing, online portals etc., For these kind of transactions NLP (Natural Language Processing), Deep learning and also Machine learning are used, so that the interface for using the software that is developed by using AI will be user friendly. In daily life, the AI is used as a personal digital assistant that are used in smartphones, in online shopping that provides platform for buying goods, in entertainment for watching movies etc., and now AI is evolved in learning and education. Many authors and developers are performing researches to integrate AIML (Artificial Intelligence Machine Learning) for education purpose, it can be used to find out the strength and weakness of students and also it can interact with students, so that is can free up time for teachers. AIML can play important role in future education, by personalizing the education that is, using AIML the students can access digital books, videos and guides, which creates customized environments for students and also for organization. The customized environments here refer to monitoring and evaluation tools that are created by AIML an also AR (Augmented reality) and VR (Virtual reality) based environments for personalized web based learning. Here AIML can evaluate and identify the wrong answers that are submitted by the students and also it gives the report, where the students should improve and also it helps the teachers to correct the defective side or ineffective content.

II. IMPLEMENTATION OF AIML IN COLLEGE EDUCATION

AIML in administration work

AIML can be used in admin work i.e., it can be used to prepare report cards, schedule the classes, mark attendance and also record keeping. It can also be used to schedule meeting. By using this method; it reduces the time that is spent for preparing progress report

Creating software to calculate grades by using AIML

Generally, the teachers collect the details of students such as their marks and their grades are calculated manually, which consumes more time for the professors or teachers. But once the AI is developed as grading software all the manual process is done in fraction of seconds. For this kind of tasks cloud based platform can be created.

Developing Voice Assistance(VA)

This method can be useful for the students to learn their subjects even when they are travelling or in home. Once the VA is created it can coach the students and also it can give instance answers for some to the basic questions.

Personalized education

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III. LIST OF INTERNATIONAL EDUCATIONAL ORGANIZATIONS THAT PROVIDE AI SOFTWARE FOR EDUCATION.

Carnegie Learning:

This Company is located in Pennsylvania which provides solutions for mathematics, literacy and world languages. The software MATHia and live lab was given "Best AI and Machine learning APP", award by edvocate awards during the year 2019.

Nuance

The head office of the company is located in Massachusetts in U.S. This is a multinational company that offers not only financial services and health care services, but also education services. This company is famous for their advanced speech recognition software that is called as Dragon speech recognition software. This software helps the limited mobility students to transcribe more than 60 words per minute. This software also provides feedback, student progress assessment and also effective lesson plans.

Century tech

This Company is located in England. It is a AI learning and teaching platform. This platform combines in AI and Neuroscience to provide solutions for schools and college students to learn English, Maths and science in Next level. This century tech team consists of technologist, Neuroscientists and teachers. who provide the students with personalized learning modules, so that students can understand the concepts easily.

Querium

This is a leading company for educating AI through online. This platform became famous, because of its user-friendly platform and also for advanced simulation technology. This interface is available for students to answer their queries round the clock.

IV. TECHNOLOGIES THAT ARE USED FOR EDUCATIONAL PURPOSE

Chatbots

This AI educational application is more helpful for the students to learn, read and understand specific topics such as reading and doing Maths. Chatbots not only help the students to learn, but also does the analysis for assessment also. In future, it can also be used to reduce the tasks assigned to teachers.

Virtual Reality(VR)

It is a 3D computer generated environment where people can interact with. It helps the students to feel that they are interconnected. Students in different classrooms can also interact safely. Using VR teachers can also find a new way to engage their student.

Robotics

The use of robotics in education has increased rapidly in the last few years. From the student point of view, the robots are very helpful for exploring any topic based on education in depth. It can answer the latest information in depth with human like facial expression. which is very effective and students are not bored. The robots can provide one to one time with students. From the teacher's point of view, it can be used as an instructional tool to teach lessons to the students.

V. CHALLENGES FACED FOR IMPLEMENTING AI IN INDIAN EDUCATION SYSTEM

The main challenge that is faced by our country for implementing full-fledged AI is lack of infrastructure. Because in our country, there are socio economic inequalities in education sector [10] i.e. out of 100% of students, only 20% of students from our society is more likely to attend English medium, remaining set of students may study other language as their medium of instructions. The literacy rate of female is less than male [10]. It is considered as 74.04% of population is fully literate, 65.46% females and 82.14 males are literate. Other than these there are some of the other issues like digital divide, linguistic rate, dropout rate etc., are some of the crucial challenges faced for implementing AI in Indian educational sector [10].

Even though there are many challenges, from the report of UNESCO, our country is aiming to achieve in implementing AI in various fields, especially in education. Already it has been implemented in some of the schools and colleges very effectively. From the survey done by the UNESCO, it has been found that some of the government funded colleges and also private colleges have implemented AI as separate division and also many software tools have been developed for differently abled children. The following table 1 shows AI tools for differently abled children.

5.1 AI tools for differently abled children

Table 1: Descriptive Statics

Name of the Software	Type of Disability
Cogniable	Autism
EYE-D	Visually impaired
Attention Kart	Special needs
I-stem	Various disabilities

The following table 2 shows some of the online companies that offers online courses to Indian students.

Table 2: Online AI courses offered to students by Indian companies

Name of the company	Description
Eduflq	AI introduction, AI programming using JavaScript and python.
Codevidhya	Consist of 3D games that is developed using Python.
Futolearn	Machine learning,APP lab,AI inspire

VI. CONCLUSION

This topic is very controversial, because there are advantages and disadvantages in implementing AI. Whatever we have discussed so far can be considered as advantages, but many argue with one of the main disadvantage is that the AI may replace teachers. It may take away humans in education. But in my point of view, I basically feel that it cannot completely replace teachers because it doesn't have emotion. Therefore, students may feel that, they are not being cared by Artificial intelligence. Since AI have more benefits than disadvantages, keeping everything in mind, it must be considered that human must rule AI, and we should not allow AI to rule humans. As an argument in any case, it cannot replace humans.

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