Personal Information

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Introduction

Artificial intelligence (AI) is the science of manufacturing machines that are able to think like humans. It can do things that are considered "smart." AI technology can process large amounts of data in many different ways, unlike humans. The goal for AI is to be able to do things such as recognize patterns, make decisions, propose solutions, solve problems of various forms and judge like humans.

Artificial intelligence is a topic that has been discussed in philosophy and science fiction for decades but has rapidly become a reality in the recent years. Well-known companies like Google are investing billions into developing more and more AI applications on various areas such as medicine, art, education, history, healthcare, finance, commerce, marketing, sales, navigation, robotics, gaming, agriculture, social media, automobiles, astronomy, data security etc. The list is probably endless. As a result, AI covers some fascinating areas, from how we design intelligent machines to what our future might look like when these machines are more ubiquitous than humans. A favorite example of all of us students might be when Siri, our i-phone personal assistant, informs us about the weather conditions in our city.

When people are asked about AI, they usually think of Hollywood blockbusters like The Terminator. It's not surprising that someone who has never heard nor seen any mention about artificial intelligence before, often conjures up images similar to movies such as The Terminator— something which most might consider an accurate representation. Most people think we are at a point where AI applications can do all things for us— take care of our jobs, make decisions without consulting with humans, and so forth.

Artificial intelligence involves using computers to do things that traditionally require human intelligence.AI technology is at the very foundation of some things, such as image recognition and classification. It's also changing how we make decisions— for example, it can be used to predict traffic light systems or when you get your coffee in the morning. The whole process of AI is based on machine learning techniques. Machine learning (ML) is a subset of artificial intelligence and is a science of getting computers to learn and act as humans do.

In traditional programming, a computer is given input data and an algorithm to produce an output. If a computer is given input data with the corresponding output data, it can learn the algorithm itself and, therefore, continue to predict the right output data. This is called supervised learning. Alternatively, if a computer is given a complex set of input data with no corresponding output data, the machine identifies the relationships in the data to provide valuable insights for decision-makers. This is called unsupervised learning.

Since the advance of machine learning methods, programming has become easier. Machine learning

allows developers to just give some basic suggestions on how certain things should be done and leave room open for more possibilities so our programs can learn from other data sets too. Driverless cars are a good example. People don't need to write out instructions for how to deal with every possible thing that could happen involving a pedestrian. Instead, they can teach the car not to hit pedestrians and provide it with millions of pictures of pedestrians walking near roads. This will help the car know what it needs to do when it "sees" something similar in the future.

Presentation

Usually when you hear the phrase "Artificial Intelligence" what comes to mind are technological sectors and applications that seem complicated or difficult to understand. However, as it is a technology that is constantly evolving, trained and learning quickly, depending on the data "fed" by its creators, little by little the range of its possibilities is revealed. Our example derives from the educational sector.

A typical example is **the Ithaka tool,** a machine learning model and AI app, created by DeepMind, a multinational company, which is used in the restoration of ancient Greek texts. The original texts from which we take the ancient texts are most often damaged by time, with parts of them missing, a fact that makes it difficult to date and restore them correctly, in a way that is as close as possible to the original. The interdisciplinary approach to classical philology takes a lot of time and goes through methods that try to be as effective and objective as possible, in order to reveal the true nature of a text. Is it a fragmentary preserved lost masterpiece of ancient Greek literature or an accounting record of a business?

Ithaca's artificial intelligence tool does not come to provide the solution, doing the work of philologists, but to equip them with a reliable tool that will make it easier for them, help them save time and discover details that they might have missed. In a paper published in the journal Nature, an example of the use of this tool and its effectiveness is presented on a text from classical Athens. The researchers had dated the manuscript to be in 445 B.C., but Ithaca placed it around 420 B.C. As for the text itself, the researchers had succeeded in their first attempts to restore it correctly by 25%, which means that they would have a long way to go and work ahead of them to achieve a better result. But when they used Ithaca's tool, they soon reached 72 %.

The interesting thing here is not only the fact that such an advanced technological tool is used in a humanistic science, but the way it is done: Artificial Intelligence speeds up the research process, draws attention to data and details that scientists may not have seen, in short, gathers the data that humans need to evolve their research and make the right decisions. From then on, it is human expertise that will decide on the solution and the next steps.

The advantages as presented above are easily understandable. However, these kinds of applications must ensure that they are free for all, that they use an open source software and that the human factor is always the determining factor. In this way, AI is accessible to all interested parties.

Reflection

When you think about artificial intelligence, many futuristic images come to mind. However, AI is quickly becoming a standard part of our everyday lives and businesses. In future, AI will be able to do much more than what it can today. It will also have a bigger effect on our lives from social media to mobile phones, autonomous vehicles, wearable devices, home assistants, Chabots and so many others.

Artificial Intelligence (AI) has the potential to address some of the biggest challenges in education today, innovative teaching and learning practices, and accelerate progress. However, rapid technological developments inevitably bring multiple risks and challenges, which have so far outpaced policy debates and regulatory frameworks. It is essential that progress ensures that its application in educational contexts is guided by the core principles of inclusion and equity.

AI-powered educational technology encompasses tools for teachers, students and administrators. Educational games, adaptive learning platforms, Chatbots and intelligent tutoring systems provide individualized support for learners. Automated grading, feedback and planning programs cater to education professionals.

AI can empower educators, accelerate learning, and personalize educational experiences, quickly and easily. On the other hand, the risks of bias, misinformation, and student isolation demand careful scrutiny.

In conclusion, AI has the ability to revolutionize schooling. It can be used to customize mastering, offer comments, automate tasks, and create new mastering stories. However, there also are a few challenges related to the usage of AI in education, consisting of fee, bias, privacy, and task displacement. Teachers and education executives therefore, must explore the potential of AI in order to be effective advocates for their students and themselves.

Sources

1.PowerPoint presentations **Theme B, Sub-Theme C.**

2.Material for **Artificial Intelligence** on e-school.

3. APPLICATION ITHACA

4. https://ithaca.deepmind.com/

5. AI APPS

6. AI EDUCATION