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Monthly Insights

Department of
Information Technology

Articles

ARTIFICIAL INTELLIGENCE

Artificial intelligence is shaping the future of humanity across nearly every industry. It is already the main driver of emerging technologies like big data, robotics or IoT, and it will continue so for the foreseeable future.

Now if you ask what an AI is, then it depends on who you ask this question.

- Back in 1950s, the fathers of the field, Minsky and McCarthy, described AI as any task performed by a machine that would have previously been considered to require human intelligence.
- Modern definitions of what it means to create intelligence are more specific. A researcher at Google has said, intelligence is tied to a system's ability to adapt and improvise in a new environment.

We do know that a human brain is complex and magnificent at the same time. Our way of doing things is slightly different than what a machine's way is. We look for pattern rather than concrete data. Let's take an example of mobile numbers.

A human brain will probably look for recurring pattern at first go and memorize the number. Also, if someone ask you about this number, you might recall it with the sound of it rather than the number itself.

While we talk, our brain continuously searches for words and their meanings. That's Linguistic Intelligence. Similarly, while travelling we showcase Spatial Intelligence by constructing a route inside our head. There are other types like Interpersonal Intelligence which happens when we understand what other people are feeling.

AI is all about providing our machines with these types of intelligence. It can be any one or all these types. We are not superior to machines in every aspect. Our biological limitations are when a machine wins probably. Human brain takes some time to perform an activity like locating a particular word in a book. A machine will be able to do so in a matter of seconds, maybe even lesser.

During the early days of AI, a renowned philosopher coined the idea of realities of an AI system. He differentiated between AI based on their applications in real world. This produced terms such as Strong AI and Weak AI.

• Strong AI :- Also known as General Artificial Intelligence which is basically human being created artificially.
• Weak AI :- Weak AI is the other side of the coin. It is limited in its scope and will work only to a specific task. Also known as Narrow AI.

Related technologies :-
1. AI in robotics is required to let machines interact with more human touch. Types of AI used is pre-decided like Planned AI. A lot of consideration is placed on environment.
2. AI can support three important business needs: automating processes, gaining insight through data analysis, and engaging with customers and employees, etc.

Issues with AI :-
➢ Ethical issues.
➢ Data Privacy issues.
➢ Decision-making issues.
➢ High volume of data.

Applications of AI :-
Big Data and Data Science have opened many avenues in AI.

I. Expert systems have the very first of AI applications based on GOFAI.

II. Another important application of AI comes under the form of Vision Systems, which is the ability of machines to visualize physical world and develop a perception about it.

III. With Apple Siri and Google Now, mobile users experience a newer way of personalization. This is where NLP is used extensively.

Conclusions :-

AI and the technologies are one side of life that always interest and surprise us with new ideas. AI is still not implemented as shown in movies, however there are many important tries to reach the level in market. At the end we've been here through AI definition, Types, technologies related, issues, etc. This is not the end of AI, there is more to comes from it, who knows what AI can for us in the future

- Arfaat Hashmi, TE-IT

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5 Ways AI is Changing our World for the Better

Man has long feared the rise of the machine – his own creation becoming smarter and more intelligent than he. But while artificial intelligence and machine learning are rapidly changing our world and powering the Fourth Industrial Revolution, humanity does not need to be afraid

Image created live at the 2018 June Board Meeting of Salzburg Global Seminar using software developed by Ingo Hoffmann

Creating New Jobs

“Artificial intelligence will change the workforce,” affirms Carolyn Frantz, Microsoft’s Corporate Secretary. The bleak view of AI as a job killer is but one side of the coin: while 75 million jobs may disappear, as many as 133 million more engaging, less repetitive new roles are expected to be created. AI “is an opportunity for workers to focus on the parts of their jobs that may also be the most satisfying to them,” says Frantz.

Bridging Language Divides

Whether it's teaching new languages in a personalized way or translating speech and text in real-time, AI-powered language tools from Duolingo to Skype are bridging social and cultural divides in our workplaces, classrooms and everyday lives. Digital translation services are not "perfect," admits Microsoft education leader Mark Sparvell, but "they offer a means of understanding" that might not otherwise be possible.

Transforming Government

Less paperwork, quicker responses, a more efficient bureaucracy – AI has the power to drastically change public administration, but are governments ready? This tech comes with both risks and opportunities that need to be understood and evaluated. Academic Kevin Desouza believes gamification and role-playing could be the key to public servants analyzing complex cases, coming up with better solutions, and truly understanding the future of autonomous systems.

Delivering Health Care

AI has the potential to make health care “much more accessible and more affordable,” insists Paul Bates, director of NHS services at Babylon Health. Babylon, an app that offers symptom checking and fast access to physicians if needed, is providing advice to more than one million residents in central London through an AI-powered chatbot. Patients can get an accurate, safe, and convenient answer in seconds – and save health care providers’ money too.

Creating Art

Computational creativity is drastically changing the nature of art. Software, more than a tool, is becoming a creative collaborator, merging computer scientist with artist. As Austrian artist Sonja Bäumel assures, “The exhibition space becomes a lab; art becomes an expression of science, and the artist is the researcher.”

- Saksham Gupta, SE-IT

Activities

The NSS Unit of XIE participated in the Versova Beach Cleanup Drive organized by the Afroz Shah Foundation on 27th August 2022. The volunteers helped in picking up the garbage and plastic. The activity helped the volunteers do their part in caring for nature and instilled a sense of empathy towards the environment. Some useful learning about recycling and reusing was also imparted to the students through this cleanup drive.

The NSS unit of XIE volunteered for the Blood Donation Camp organized by the NSS Cell of the University of Mumbai on 12th August 2022 at Dadar Railway Station from 9:00 am to 7:00 pm on the occasion of Azadi ka Amrit Mahostav. 32 volunteers under the guidance of Prof. Vijay Jumb, the NSS-Convener, were deputed at Dadar Railway Station for the same to help the L.T.M.G. Hospital Blood Bank. The volunteers motivated the commuters of the railway station to donate blood. Some of our NSS volunteers and other students also donated blood. In all 233 units of blood were collected, which is a record no. of units collected by any college at Dadar station till date.

India's 76th Independence Day was celebrated with zeal and fervour at XIE. The NSS unit of XIE organized the Independence Day Program on 15th August 2022 to celebrate the completion of 75 years of Independence; Azadi ka Amrut Mahotsav. The event began with the welcome and introduction of the Chief Guest, Dr. Shivaji Ghungrad, the Principal of X-TECH Principal. After a short prayer song, the National Flag was hoisted by the Chief Guest. It was followed by singing of the National Anthem. Director, Fr. Dr. John Rose SJ and Principal, Dr. Y.D. Venkatesh addressed the gathering. Patriotic songs were sung by the students.

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Academics

The results of SE and TE IT for Sem IV and Sem VI Regular session AY 2021-22 were announced. The overall passing percentage of SE was 87.32% and that of TE was 95.65%. The toppers of SE are: Trupti Pawar ranking first with a 9.87 CGPA, Anshuman Sharma ranking second with a 9.74 CGPA, and Aditya Mishra ranking third with a 9.52 CGPA. The toppers of TE are: Mitesh Rege ranking first with a 9.86 CGPA, Prathana Gupta and Sonam Gupta ranking second with a 9.73 CGPA, and Shubham Bhattad ranking third with a 9.55 CGPA.

The results of the final year COMPS and IT students for Sem VIII Regular session AY 2021-22 were declared. The toppers of BE-IT are: Himanshu Gharat ranking first with a 9.90 CGPA, Reetik Gupta ranking second with a 9.75 CGPA, and Raj Shah ranking third with a 9.48 CGPA.

Achievements

On the occasion of India’s 76th Independence Day, certificates and mementos were awarded to the to the outstanding students and alumni (2021-22) of XIE. The following students were awarded the ‘Outstanding Student Award’: Jawale Prathmesh (BE-IT), Prarthana Gupta (BEIT), Trupti Pawar (TE-IT), Anisha Prabhu (TE-IT), Rakshita Sarap (SE-IT), Saksham Gupta (SE-IT). The following Alumni from the Batch of 2021-22 were also felicitated: Baljot Singh Kohli and Himanshu Gharat from IT.

Our Amazing Crew

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