

Artificial Intelligence-The Roadmap For Enriched And Incredible Human Life.

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Abstract-As a social being, it is incumbent on all of us to make sure we are building a world in which every individual has an opportunity to thrive. With the same Understanding I penned what AI can do and how it fits into our strategy, I tried to encapsulate the things what makes AI different from other technology that is how it's going to bring humans and machines closer together, about the pessimistic idea about machines replacing humans And the illustrious victories of AI that astonished people.

This paper also includes the introduction, mechanism and recent developments in AI. By which I have concluded that predicting the future isn't magic it's artificial Intelligence .It is one of the milestones to shape the future.AI is exhibited by artificial entity, a System by which we can expect a cultural and skill shift. AI could spread its wings in medicine, engineering, military as well as in many common home computer software applications like in computer chess and other games.

Introduction

Artificial intelligence became one of the most commonly used words by every techie, there is no meaning of getting petrified by this because it is one of the finest technology which is capable of replacing human decision with more sophisticated ideas of machines. Before knowing about the complex mechanism involved in AI. It would be better if we deal with its origin first .it was named by john mc carthy in the year 1956 during his first academic conference on machines. But the travel to understand the machines thinking ability began much ago .In vannevar bush's seminar work which was held in the year 1945 he proposed a system which amplifies people's own knowledge and understanding. Within next five years a man named Alan turning published a paper on notion of machines which are able to simulate human beings with more accurately.

[Turing50].In this way the term AI came into the picture.

(AI) is the simulation of human intelligence processes by computerised machines, these processes consists of learning (the acquisition of information and rules for using the information), reasoning (rules to reach accurate or definite conclusions) and self-corrector.

AI and its applications consist of various kinds of convectional, computational strategies and also consist of fuzzy systems; neural networks and evolutionary computation .These are majorly used in

Natural language processing, pattern recognition. In this way, AI could match its working throughout the world as an artificial brain.

Intelligence consists of many complex mechanisms and AI research could discover that computers can do a lot of things by which humans could move the mountains without keeping much efforts. Computer programs can give impressive performances on the tasks even if it is involved with complex mechanisms. Such programs are to be marked as really intelligent. By which we can build a much brighter future where humans are relieved of menial work using AI capabilities.

Types of AI

Artificial intelligence which we use in our day to day activities is popularly known as **narrow AI or weak AI** which is designed to perform a narrow task such as facial recognition, internet searches, driving a car. However, the long-term goal of many researchers is to create **general AI or strong AI** which could perform the tasks such as visual perception, speech recognition, decision making, and translations between languages

Goal of AI

The overall **goal of artificial intelligence** is to develop a technology that allows computers and machines to work-in an intelligent manner. To Create Expert Svstems – The svstems which could learn, demonstrate, exhibit intelligent behaviour, explain, and advice its users. Implementation of Human Intelligence in Machines requires Creation of systems that understand, think, learn, and behave like humans. Artificial Intelligence is the machines which are designed and programmed in a way that they could think and act like a human. Artificial Intelligence becomes the important part of our daily life as AI is indulging its benefits everywhere and as AI is all about growing, improving and getting better.

How does AI work?

AI works by combination of large amount of data with iterative, fast processing and by using intelligent algorithms, allowing the software to learn automatically from patterns or features in the data. It also work through many theories like

1. Machine learning-it is a component of artificial intelligence which could provide the capability to learn and improve automatically from experience without being programmed.

It majorly focuses on the development of computer programs that could access the data and use it learn for themselves.

2. Deep learning-deep learning is a subset of machine learning algorithms that acquires multiple layers progressively to extract higher level features. Through these things AI could make many things like handling repetitive jobs, digital assistance, reduction of error, solving out dangerous exploration.

3. Neural networks-It is a class of machine learning that consists of interconnected units which processes the information by responding to external factors, relaying information between each unit. The process requires multiple iterations at the data to find connections and to find meaning from undefined data.

4. Natural language processing (NLP)– it is the capability of computerised machines to understand, analyse and generate human language. The next level

of NLP is natural language interaction, which allows humans to communicate with computers using everyday language to perform tasks.

5.Cognitive computing- it is a subfield of AI that functions for a natural, human like interaction with machines. Using AI and cognitive computing, the goal of machine is to simulate human processes through the ability to interpret images and speech – and then speak coherently in response.

6. Graphical processing units- these are crucial to AI because they provide the heavy computational power that's required for iterative processing.

7. complex algorithms-these are being developed and combined in new ways to analyse data faster Through these algorithms machines could identify and predict events, understand complex systems and optimises unique scenarios.

Why AI is important?

Artificial Intelligence consists of the machines which are designed and programmed in such a manner that they and think and act like a human.

It could become the most important part of our daily life as AI technology is used in a wide area of day to day activities. As it could reduce human effort.

Now in most of the industries, people are using this technology to develop machine which can perform the activities like humans. Using machine for the work speeds up our process of doing work and gives us an accurate and definite result.

This could bring the idea of error free world. This technology will definitely get introduced in all the sectors with in no time and reduces human effort and could able to give accurate and faster result.

AI is the technology that is so advanced that it doesn't need to be explicitly programmed. As it could understand the motion of the work automatically and this could bring machines and humans a bit more close. This is how it differs from other technology and makes AI so important.

Recent developments in AI

1.AI technology recently developed many things like it could analyse the neural network that directly analysed the ECG signals was found to be superior for predicting one year risk of death.

Researchers analysed the result of 1.77 million ECGs.

ECGs and other records from almost 400,000 patients were analysed. AI was able accurately predict the risk of death.

Also now a day's cyber security has become a hot topic ever since it really became necessary. As, Technology evolves so do potential threats to sensitive information and networks.

2. There has been increased demand for AI solutions to boost cyber security. Professionals believe that it would accelerate incident detection, improve incident response, identify and communicate risk, and generally help them to maintain optimum situational awareness.

Palo Alto Networks recently introduced **magnifier** behavioural analytics AI solution. It models network behaviour by using structured and unstructured machine learning to improve threat detection.

3. A recently hyped development is Google Duplex, which is an AI that makes audio calls, so there is a way to go before you can confidently have a virtual secretary make your calls and run your life on your behalf.

Ultimately, we'll still need the involvement of both humans and robots for the foreseeable future. AI assistants are also one of the main examples where progress and consumer adoption has been rapid. And the more data these assistants could get, the faster they will improve.

4. Some of the farms recently started using artificial intelligence to direct crop planting, harvesting and more, and how are they getting that data in the first place?

In some trade journals, you can see unmanned aerial vehicles or drones being outfitted with precision sensors, in order to run the fields and get the data that's needed. These drones' surveillance engines can look for damaged crops, pest or weeds, dryness and many other components that are part of the difficulty of farming in general. With all of this data in hand, farmers can enhance their production and improve their strategies across the lay of the land to decrease risk, waste and liability.

5. **Sophia** a robot with a transparent skull that allows interacting with people. It one of the most sophisticated humanoid **robots** yet built. Hong Kong firm Hanson **Robotics** created **Sophia** with the usage of an advanced neural network and delicate motor controls that allow the machine to emulate human social interactions.

In this way AI is creating unremarkable mark in enhancing human life.

6. AI has an incredible potential for the banking sector. It brings automation and simplifies the process.

Recently we see many of the public and private sector banks releasing their own apps that is so used for online banking purposes which consists of chatbot which could perform as an

answering machine and help the customers continuously throughout a day. It can answer the simple questions of the users of customized banking app and direct them to the bank's website if necessary. Direct and easy operations such as opening or closing the account, transfer of funds, etc. can be done with the help of chatbots.

7. An official song to welcome Pope Francis when he visited Japan has been partly written by artificial intelligence programme. This programme could write a piece of music in few seconds.

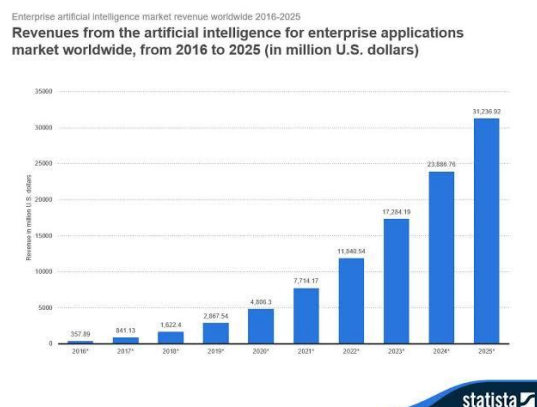
8. A new chapter of robotics unfolds the citizen friendly approach of Andhra Pradesh police. Ms. Cybria (cyber interactive robotic agent) is the new initiative by the police in the association with a group of techies to help citizens the complaints hassle free. This incredible work is been done by Robo coupler.

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Growth of AI

From the digital assistance like Siri, Alexa to self-driving cars AI is been growing progressively. As AI could encompass anything from Google search algorithm to IBM's Watson.

The following graph depicts about the business of AI.



The AI could increase its business drastically as the time is passing.

1. According to Forbes the number of AI start-ups increased 14 times since 2000.
2. Google analysts believe that next year, 2020, robots will be smart enough to mimic complex human behaviour like jokes and flirting

3. By 2025, the global AI market is expected to be almost \$60 billion; in 2016 it was \$1.4 billion.

4. Artificial intelligence has come into the mainstream because it allows us to make sense of an increasingly large amount of data in real time. Indeed, worldwide data will grow 61% to 175 zettabytes by 2025.

5. Demand for AI talent has doubled in the last two years. And talent, which is been increasing gradually, remains in short supply with two roles available for every AI professional today. Technology and financial service companies are currently absorbing 60% of AI talent.

6. Sixty-three percent of people prefer to message a chat bot vs. talk with a human when communicating with a business.

AI Will Not Take Our Jobs

There are many fears left in the cores of many hearts and that we will be left jobless and hopeless as super, smart AI could steal all of our jobs. Most of the people and many AI films portray this picture as the ultimate goal, enabling humans to live a life full of leisure. The truth is much more benign as we could imagine.

But the actual Fact is that AI is likely to create more jobs than it will destroy. Yes, AI it would automate routine work, starting from lower-skilled areas with repeatable, measurable tasks. But research firm Gartner predicts that by 2020 AI could create more jobs than depleting. Often in major phases of transition due to technology, temporary job loss will occur, but it will be followed by business transformation which includes both growth and hiring and "AI is likely to follow this path."

Gartner could predict that 1.8 million jobs will be lost, most notably in manufacturing industries. But they also estimated that 2.3 million jobs could be created in education, healthcare, and the public sector. These jobs will be opened up by growth of AI in the industries. And AI coupling with human intelligence will enable a whole new set of opportunities.

Jobs been replaced by AI is one of the pessimistic thought about. It is sometimes incorrectly framed as machines replacing humans. It's not about machines replacing the humans, but it's about the machines augmenting humans. Of course with every technology there are challenges. Humans and machines have different relative strengths and weaknesses, and it's about the combination of these two that will allow human intents and business process to scale 10x, 100x, and beyond that in the coming years. "As technology develops very quickly in an optimistic way only when we let it. And the beautiful things happen only when we distance our negativity. We should all be optimistic about what's to come. The world is getting better and the progress is coming faster than ever. So let Us welcome in appositive manner.

Does AI going to deplete human race?

Now let's take the most controversy issue. That is AI depleting human life. Before that let's see what error handling is?

Error handling refers to the responsible recovery procedures from **error** conditions present in a software application. In other words, it is the process that is comprised of anticipation, detection and resolution of application errors, programming errors or communication errors. This is programming concept but let us use the same thing here. Before using this we should know the term **singularity**.

Singularity – it is the hypothetical point in future when technological growth becomes uncontrollable and irreversible, resulting in unfathomable changes to human civilization.

Like at the point humans can't control machines as it would be impossible to control the mind of the machine which is fully developed. And its iq level can't be imagined. so if we could handle the error of exceeding the criteria of singularity then we can make wonders. Then the statement "predicting the future is isn't magic it's AI" would get reflected from every corner of the world.

Conclusion

Prediction of future is not in our hands. Most of the scenarios of the future are unpredictable and they are hypothetical. AI conclusion would really come to those category as "with high hope for the future no prediction is ventured. "

As "optimism is the faith that could leads us to achievement". Understanding what AI could do and how it fits into your strategy is the beginning, not the end, of that process.

"The relationship between artificial intelligence human intelligence and (HI + AI) will necessarily be one of symbiosis. The challenge and potential of exploring this co-evolutionary future is the biggest story of the next century and one in which a closeness in development velocity is a necessity."

The new spring in AI is the most significant development in computing in lifetime. Every month, there are new transformative and stunning applications techniques.

As such "Seeing the mud around a lotus is pessimism, seeing a lotus in the mud is optimism. "Let us see the lotus in AI.

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