Artificial Intelligence and Human Computing: Emergence As Individual And Social Phenomena

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Abstract: *Technology has always played vital role in social transformation however Artificial intelligence (AI) emerged as game changer in information and technology. Artificial intelligence probably is the first kind of technological intervention which is intended to significantly collaborate in human action. The idea of machine helping and participation in human action is overwhelming, ultimately in a shorter period of time Artificial intelligence has become popular technology in all sectors of the society. AI is working of the principle of cooperation and collaboration to accomplish human need as an assistant. In very shorter time it is being used in cyber world, cyber network expansion, sports, music, and in heath care as the world witnessed recently in fight against the Pandemic. Apparently it seems that AI is participating in individual action, however every individual action affecting the nature of social action in broader aspect. Hence the Artificial intelligence technology is now exists as an element of social phenomena. Today AI technology is influencing individual action in all social sectors and individual space. This will be interesting to see whether in coming time AI will be decisive in social system framework, whether humans will relay on human computing for more collaboration and cooperation to complete their need.*

Index Terms - Artificial Intelligence, Human computing, Digital Society, Social Change, Human Interaction

I. INTRODUCTION

Artificial Intelligence (AI) is buzz word for everyone these days; the truth is it becomes integral part of digital society. It is fascinating for humans that machine can interact with the humans and act accordingly eventually AI has got fourfold response and growth in last few decades. Basically Artificial Intelligence is machine's ability to learn and read data and respond correctly to create specific help or to conduct specific work. This is the most human oriented technology which deliver the one to one connect with humans. It's evolutionary technology which can process the data to connect human to complete their need. Its kind of social, emotional connects to humans which is perhaps the most human oriented exhibition of machine. Inception of the machine and digital assistance to humans was promising and created lot of possibilities in the world of technologies. Initially it was very fascinating idea that machine will behave with intelligence and machines will be created on the account of human behavior. It was hard to digest that machine can think and act accordingly to associate the human needs. Innovations made in AI sector were to create the machines working and responding on the thought process and reasoning like humans. AI technology created buzz when a historic computer program played chess with Gary Kasparov and defeated him. Probably it was first indicator that machine could think like human and even better than humans. Next were the robotics and its development which took machines into another level. However soon it was proved that machine can work according to human intelligence when Simon Herb stated symbol manipulation theory. Over the period of time many scientist contributed into AI field. The journey started with smart machine to robotics to GPS to voice command and now interacting with human action in form of assistant.

Artificial intelligence: worldwide impact on various sectors

This was a great concept that machine will identify and understand the human emotions. It this case the AI technique runs on the patterns because even if emotions or feeling can't understood by machine however the patterns of emotions and human behavior can be identify and can be reacted accordingly. AI technology adhere that typical actions and pattern of behavior which can be coded into the computer language to act accordingly. During these years AI travelled long way in terms of innovations and new branches. One of the most important uses of AI technology is remote sensing and the GPS. This technology has helped humans a lot to move, track and to locate. Another important landmark of AI is in automated engineering. All type of machine in automated engineering new innovations has been made to save human energy and to make the machine working safe and time saving. The most important intervention of AI is in the field of health and medical where machines are making equally contribution to diagnose and provide assistance in major medical

operations. In recent time when pandemic was at its high, various AI loaded equipments made this fight easy for humans. Apart from this entertainment, music, vehicles, water plants, medical units. Lights, self driven cars, air traffic , mobile phones, emergency services, etc fields are benefited from AI technology. AI based applications are now most popular in youths making their day to day life easy. AI has playing major role in the field of education with various innovations in information technology. Today education field has become more interactive, whole teaching learning idea has been changed into the new concepts with the development in the field of information and technology. The education has become more interesting with the smart class rooms and online teaching. New teaching techniques have been introduced worldwide which are helping students to understand the curricula more effectively. Institutions can collaborate and exchange the learning techniques more sophisticatedly. The idea of interactive learning has made child education more effective and easy. The research in education becomes more specific and accurate with the AI based web development. AI made human interaction easy and more effective with language translation and with providing the tools for location based translation. Due to this people are migrating worldwide without language barrier and even they could work effectively with location based services.

Business and commercial activities at individual response
In the field of Social Networking Artificial intelligence has made very deep impact in very aspects. The use of mobile phone with hundreds of applications has driven the human life even faster. The day to day life without using mobile phone and applications is hardly impossible today. The AI technology has added the mobile assistant to help in human in various works in day to day life. The specific search made on cell phones on any sight helps to reach specific product, destination and business accurately. The AI techno has made social networking sites easily accessible and user friendly. Business, Marketing, distribution and exchange have easily possible through AI technology. To achieve business goals, social networking sites are playing major role these days. Social media is helping to connect targeted customer for respective business firms. Apart from this social networking sites are significant for connecting people. Social interaction through 'social media' is widely accepted way of communication today. Public opinion and public movements are being created effectively on social media sites. Everyday life of modern world is moving fast making difficult for each one to connect personally. Social media is the faster way to interact with number of persons at the moment. AI is helping social media sites to find the individuals who are keeping same interest and can collaborate and cooperate in common purpose. Huge amount of digital data is uploaded daily on various social networking sites and data processing is huge task for any IT application. With help of AI huge data is getting processed accordingly data provided for effective implementation of work. Education, businesses, medical, engineering, news media, etc sectors are benefited from the social networking to expand and expanding business. Constant research has been done in the field of AI, technology has upgraded in the field of IT, automation of machines and social networking. The major research has been carried out in the field of defiance technology. The rocket guiding system, self driven drone and modern aircraft are the latest technology with AI. The new technology is capable and ensures the safety of individuals and minimizes the unforeseen loss. The automated radar system is latest and smart technology to track and respond the unanticipated attacks. The AI based explosive tracking system has made civil society even safer by identifying and location the explosives. Research in medical field has given the major breakthrough as it helps in the diagnosis and in critical surgeries. The sophisticated surgeries are possible with minimum threats and maximum possibilities. Transport systems are working more smoothly with the help of GPS and vehicle tracking systems. Self driving cars is fascinating innovation made by the latest technology based on AI
The 'AI' also called 'Cognitive technologies' is all set to provide assistance in day to day work. However one of the argument regarding 'AI' is, even if it can identify the human patterns of behavior it can't imitate human emotions. The critics says, AI is largely engaged in business and commercial activities however describing AI as assistant in human interaction is not true. Priorities of all AI are focused on the commercial view and making the financial benefits of companies. AI is vastly used in the process of the automation of the business; with the increasing use of AI, man power is substantially reduced. It helps the big companies to cut down their expenses on salaries however it is not in favor in mass employment. The big firms are also using AI in huge data processing and data analysis for business purpose. The business firms processing huge data smartly to focus on a specific group of people in their respective business. All these days AI is largely used for taking references to sale various company products. With the help of social networking sites and the basis on search made by customers the companies are able to know the demand trend of customers. Business firms are finding this information very useful in the sale of electronic items. AI is also helping the credit firms, banks, insurance firms and other organization to track the customers and keep vigil on the credit issues and problems. Companies can detect and track the delay, gap and solve issues related with customer payment. There are many sectors which are doing improvement on the basis on the feedback of customers. AI technology can help companies to collect the information regarding feedback and details of the personal issues for further improvement of products. Thus campiness and business firms can make further changes and quality improvements in their products. With the help of AI technology everything can be ensured very personalize and in response with individual choice. Face and voice recognition by any machine can ensure personal recognition and machine response to individual. Most popular device Google assistant 'Alexa' is the best example of it. Moreover AI technology is use in commercial and business activities; nowadays it is being used in various social sectors like health, education, rural banking and personal caring.

Artificial intelligence and social Sector
In recent times AI has emerged as a health assistant in various health issues at personal and institutional level. Health related issues can be track and recorded through AI at personal level in big health firms and hospitals. Government of India and various state governments are providing various health schemes. It is hard to keep follow up and personal care in this regard. AI technology ensures daily feedback and maintain smart track of the patient. In recent times when pandemic was hitting hard to whole world, AI less technology proved useful by detecting the virus without touching the patient. It was crucial time when worldwide different health issues emerged like 'Mucormycosis'. AI technology has made contribution in fighting corona by helping to doctors. Nowadays with smart technology individual health record and status can be kept and followed by doctors. It can be helpful in future treatment of the patient. The most significant feature of AI machine in health sector is predicating future complications in various health issues. Mainly the deadly decease

like heart issues, cancer and HIV. Future indication can be made and accordingly the diseases can be treated. This advance facility has proven helpful to upgrade the health status of the masses. New technology has ability to alert future threats and make alarm on certain symptoms. Machine can dingoes and assume with specific pattern of the patient what kind of treatment is needed immediately. All advance surgeries are now being done with help of smart machines mostly equipped with AI technology. Robotic surgery is the best example of it. There is various camera equipments which keep vigil on the patient situation until the surgery get successful. Today all delicate surgeries like eye, brain and heart surgery are being done with the help of AI machines, the accuracy of the success increased with help of these intelligent machines. Modern education is drastically changed and using IT equipment working on AI technology. The interactive education from the school to higher education is working effectively. Students are learning more effectively with IT technology and AI equipment. Research in education has become more sophisticated with the specific research. Google assistant and the specific word search including the history based suggestion has made research more refined. The huge data is analyzed and produced as per the research requirement. The AI technology used in education has made research safer, for example the idea of drug synthesis with the use of computers can be done with the help of AI so that time and safety can be ensured before going to laboratory. It saves time and ensures safety of the researcher and even it can suggest possible change in actual work. The Artificial intelligence technology used to prevent the cyber crime and other criminal activities has made society even safer. The use of detecting the criminal activities via software is becomes a support for the investigating and policing agencies.

In recent time artificial intelligence is emerged as social and individual assistance moreover it has become social phenomenon. The AI technology is largely used to be more proactive and providing support based on human needs. Moreover this technology is designed accordingly human thinking. It is responsive mechanisms which is answerable to specific individual. Over the period of time the research made in the field of AI is proved beneficial to the society. With the help of patterns, face recognition, speech identification machines are reacting to human needs. This kind of personal work is fascinating, moreover the AI technology used in serious work in various sector like baking, defense, cyber world and health is significant in social and individual case. Automated machines and robotics are playing major roles in critical operations in health field. The most beneficial part of smart machine with AI is that any development can be planned according to human need. The smart technology is based upon the human interaction pattern and frequency. It is kind of a advance planning so any personal or societal planning to execute any kind of work. If the planning is perfect it might be possible that the execution will be simple so as the outcome of the work will be great.

Limitations of AI

Over the years AI technology has became more popular in each section of society however it has some limitations. The ultimate truth is AI technology can't replace the human relation and human competencies. In some aspects the misuse of the modern A I technology is evident mostly in the cyber crime. Every development has its side effects so as the AI. In recent years big scams has been executed in the banking and cyber area. The AI technology is being updated every day and lot money has being spent on the research in this area. However the outcome is still out of common mans reach. For example the smart self driven cars are most expensive and still not affordable for all. AI technology is very vast and default to regulate by any agency. Prevention of misuse cannot ensure and government is finding itself in hard situation as far as the law and regulation regarding use of AI is concern. Installation of AI technology in health and education is need of the hour however it is still out of reach for common masses.

Conclusion

The world of modern information technology is accelerated with the Artificial Intelligence (AI) Use of AI in day to day life is increased in many fold. New research and technology is being introduced in the AI sector every year. AI technology machines are doing various jobs which is actually benefiting the humans in everyday life. Social sector like health and education are using AI technology at various levels with new dimensions. It has to be accepted that machine have become a interactive devise and doing interactive work with humans. At large AI has made life more easy and machine friendly with new technology however there are many apprehensions about this technology The most and crucial issue is the privacy of the individual is going to compromise as information processed and exchanged at many platforms. For example using the web services is not remain so private when machine extract the information and exchanged with the world of social media for various purpose. Commercial business taking most advantages of this new technology for extracting data and using it for the business purpose. Most of the cyber crimes are being executed with this wide information. Issue of privacy is very important in the new digital society.

Any search made by the individual captured by the social media with the help of AI technology and the business community use it for commercial purpose. Most of the time your own choice is diverted and you have been dragged to the commercial sites. On the social media sites individuals are suggested friend for invitation with whom most of the times interaction gets started. Social media sites are actually diverting you to new friends ever you don't know them. This is turning wrong sometimes, most of the cyber crimes are happening only because someone is decided to cheat you on the social media platform. The AI machines are programmed in a way so that they can give self command and act like a human. However sometime it can go wrong in some cases. The numbers of accident of self driven cars are increasing. Most worried thing is humans are obsessed by the AI technology. Google assistant, Alexa, GPS and social media sites are excessively used by human .this excessive habits are taking toll on human mind and body. It is true that AI based technology is emerged as alternative of human capacity however it must be ensure that the employment issue must not be ignore. The warmth of human interaction is missing and most of the individuals are feeling lonely at some point of time moreover human capacity can't be replaced by the machine.

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