

Topic

Artificial Intelligence and future of mankind

1) Introduction :

Thesis statement

Artificial Intelligence holds myriad prospects for humankind, it however, poses certain challenges that need to be tackled by taking some steps to secure the bright future of humankind.

2) What is Artificial Intelligence and How does it work?

3) A cursory glance at the current development in (A.I)

4) what are some prospects that A.I holds for humankind in future?

a) Transformation of health care: from diagnosis disease to completely uprooting the diseases

(b) It helps to enhance trade and business by bringing new innovations

(c) It brings revolution in transportation sector = self-driving cars rulling the roads

(d) A.I increasing agricultural output and

ensuring global food security

(e) A.I is winning new climate war with the inventions of mitigating technologies.

(f) A.I becomes permanent part of criminal justice system and helps to normalize the crime rates

5) What are the certain challenges posed by A.I to human kind's future?

(a) A.I increases the threat of joblessness, by replacing ~~machines~~^{human beings} with machines.

(b) A.I and rise of digital dictatorship is mounting the insecurities through big data algorithm.

(c) Robots become our master rather than slaves and we are overly dependent on technologies.

(d) A.I surges the economic challenges for unskilled small businesses.

(e) Development of catastrophic war tools and weaponizations lead destructions.

(f) The gap between rich and poor is widening due to developments of A.I

6) What are proactive steps to secure a bright future of humankind and A.I?

a) Encouraging innovations based public-private partnership to reduce employment

b) Ensuring checks and balances on the usage of social media and websites

c) Promoting of Technology for Peace narrative at global level.

d) Declining the gap between developing and developed nations, that balance can be ensured.

7) Can man and machines move and work together in future?

8) Conclusion

Essay:

Since the Big Bang, this earth has gone through many transformations. From existence of unicellular organism to multi-cellular organism, from multicellular to complex structure creatures. This earth has witnessed these phenomenon.

Surprisingly a phenomenon that started developing gradually after industrial age. The first industrial revolution used water and steam power to mechanize production. The second use electric power to create mass production. The third used electronics and information technology to automate production. The fourth revolution is technological revolution which is known as Artificial Intelligence (World Economic Forum). It is twenty first century which is century of Artificial Intelligence. So, the coming technological revolution might establish the authority of Big Data algorithms.

Our feelings aren't based on intuitions, inspiration or freedom - they are based on calculation.

There are many prospects of artificial intelligence which affects the human's life such as transformation in healthcare system, economic and trade opportunities, combating crimes and increasing agricultural advancements. These are some questions arising why do we need

Artificial Intelligence? what are the benefits of A.I? what are certain challenges posed by A.I to human kind's future? and can man and machines move and work together? A.I holds myriad prospects for humankind. It however, poses certain challenges that need to be tackled by taking some steps to secure the bright future of humankind.

It is necessary to discuss the term Artificial Intelligence. Artificial Intelligence is the simulation of human intelligence process by machines, especially computer system. Artificial Intelligence speed up, improves precision and increase the efficacy of human endeavors. To predict fraudulent transactions, implement rapid and accurate credit scoring, institutions can use artificial intelligence approaches. Artificial Intelligence a term coined by, emeritus Stanford Professor John McCarthy in 1955, "the science and engineering of making intelligent machines."

Artificial Intelligence has become technological reality for business and industries. A.I is widely used at everywhere - personal or professional life. People are relying on machines. By the early 1990s, Blockbuster had opened its 1000th store. In 2010 Blockbuster announced bankruptcy - why? Because someone sought to redesign the movie rental business. According to Artificial Intelligence Index report, in 2019, A.I adoption among large companies has increased by 47% as compared to 2018. It can be seen through, A.I and related subjects are included in University's syllabus to increase mental capability of students, such as C++ command subject in I.T department. However, A.I is exponentially surging in all over the world.

When moving to the future of mankind, there are some prospects of Artificial Intelligence which change the way of ^{living} in all spheres of life. The first and foremost is transformation of health care. Most of the ^{people} were dying without knowing even their disease and it was very difficult for doctors to diagnose the disease on time. But thanks to A.I, which

makes it ^{much} ~~more~~ easier now; ~~only~~ ^{where not} only diseases are being diagnosed but, ^{also} detrimental diseases are uprooted, for example, cancer hepatitis, and brain tumours. These innovations are very beneficial and favourable for human beings. A multi-talented artist ~~and~~ ^{computer} scientist Alan Kay says: The best way to predict the future is to invent it. As per report Artificial Intelligence Index, "70% investment has been increased since last year on A.I innovations." These inventions will remain continue.

By bringing advancements, innovation and creativities, ^{or which} ~~it~~ increases the opportunities of trade and businesses. It is the natural phenomenon, people prefer new and attractive things rather than old-fashioned ordumce. A.I has also been able to strengthen the economies of states. The United States of America ^{which is} known as hub of Artificial Intelligence. It's prime focus remains on A.I. On the other hand, China and India are also focusing on bringing advancements in I.T sectors. PwC's Annual Global CEO survey highlighted that 63% of CEO's believe A.I will have a large impact than internet and by

2030, it will lead to an estimated \$15.7 trillion or 26% increase, in global GDP. AI has become the backbone of state's economy ~~which~~ because it provides different opportunities to strengthen the economy.

Moving on, self-driving cars are not just seen in animation and BD movies, where people feel themselves in different animated worlds, it becomes reality now.

It is AI which makes it possible. A self-driving car, also known as autonomous car, driverless or robotic car; car is capable of travelling without human being's input. As Yuval Noah Harari writes in his book '21 lessons for the 21st century' "self-driving cars reduce the chances of accidents because automated machines follows instructions and traffic signal and rules". December 2020, Waymo, became the first service provider to offer driverless taxi rides to the general public in part of Phoenix, Arizona. Furthermore, Saudi Arabia in its 2030 vision is ~~launching~~ ^{constructing} Neom city which is completely based on Artificial Intelligence.

At present, most of the people are suffering from food insecurity under the sun

And Pakistan is one of those countries, where 36.9% ^{food insecurity increases} ~~people~~ and agricultural yield is reduces 4%. A.I has provided relief and recuperated^{to} agricultural yield, because china has announced to provide hybrid seeds to Pakistan, which will increase the efficiency and yield of agriculture. These seeds are formed through processes and tools which make them more effective and beneficial. Through different innovative tools barren soil can be converted into fertile soil. For example, Food Fertilizer is the one of those companies ^{that} ~~which~~ are working on different organic and inorganic minerals and bringing developments in agricultural sectors.

The Artificial Intelligence has become juggernaut whose importance can't be denied, in fact it's value is piling up when it's winning the new climate war. The global warming is hot topic among the states, and tries to alleviate the abnoxious effects of global warming. A.I plays very important role, for example, Richter scale and seismograph are being used for measuring the level of earthquakes.

On the other hand, satellites ^{in space} ~~are~~ are measuring and analyzing green house gases and ozone depletion, which makes us able to know intensity of global warming. As British-American theoretical physicist Freeman Dyson says: Technology is a gift of God. After the gift of life it is perhaps the greatest of God's gifts. It is mother of civilization, of arts and of sciences. A.I becomes good friend which helps to eradicate many problems of the world.

It can't be wrong to say that A.I becomes permanent part of criminal justice system. It is further bolstered by explaining the current invention of implanted device which is known as Neuralink. It is invented by Elon Musk's company, its device makes use of ultra-flexible, tiny electrodes implanted directly into the brain tissue to listen to the communication between neurons. This device helps to know what is inside the suspect's mind. On the other hand Brain-machine Interface is widely used during interrogation, this device controls the mind and analyzes the suspect's answers either true or false.

However, there are many other devices - CCTV camera, trackers, and detecting devices helps to reach at conclusion. A.I and criminal justice system go hand in hand ^{which} ~~and~~ ensures and enforce ^{stringent} laws that uproots the evil of crimes.

There are certain challenges posed by Artificial Intelligence to humankind future, chief among which is threat of unemployment or joblessness. It is twenty-first century which is known as century of A.I, and it demands skillful labour who ^{must be} ~~know~~ aware of usage machines. It is big threat for those who are less educated and untrained. In January 2020, the World Economic Forum launched the Reskilling Revolution, a public private initiative designed to aggregate government and businesses' efforts and share the practices. The initiative aims to train and future proof one billion workers by 2030. But remaining seven billion population is under threat because they are unable to compete with this A.I's world.

As touted, the rise of digital dictatorship is mounting the insecurities through

big data algorithm. Most of the people are increasingly relying on algorithms to make decision for them, but it is unlikely that the algorithms will start to consciously manipulate them, because they won't have consciousness. As, intelligence and consciousness are very different things, intelligence is the ability to solve problems and consciousness is the ability to feel things such as pain, joy and love. "We will not appoint an A.I to be chancellor of the Germany. The chancellor could still choose between several different options, but all these option will be the outcome of Bigdata analysis and they will reflect the way A.I views the world more than the way humans view it" (Yuval Noah Harari, 21 lessons for the 21st century). People are easily being manipulated by A.I which increases insecurities.

Similarly, robots become master rather than slaves. We make these robots for our easiness and to save our time but we became their slaves. By the large, we are overly dependent on technologies from our kitchen gadgets to

to big machines in industries. It seems as these machines are not made for us in fact we made for them. However, we are unlikely to face a robot rebellion in the coming future. For every dollar and every minute we invest in improving artificial intelligence, rather than investing a dollar and minute in advancing human consciousness. The writing is on the wall, people will be controlled by their own inventions.

Artificial Intelligence increases ~~our~~ economic inequalities, where people are already suffering from inequalities, A.I adds fuel to existing problems. A.I requires human skills and advancement and those who are under privilege unable to compete with new innovations, for example, Uber is competing with traditional taxi service and earning more than taxi drivers. Mostly people invest in A.I or in new technologies but failed to ~~can~~ maintain for long time, it looks out of frying pan into the fire. Social choice problem is the challenge

of aggregating the preferences of multiple individuals into a single function (Stuart J. Russell, *Human Compatible*, chapter six). Everyone has one's own capacity and capabilities, one machine can't measure potentials of different people at same time.

Moreover, the world is moving toward destructions ~~and~~ due to weaponization. A.I. is the causes belli of those destructions World has become witness of two deadly world wars and thousands of people were killed, when America drop the bomb over Japan. At present, one misunderstanding can destroy the whole world in a second. This is all about new innovations and advancements in nuclear weapons. As, American philosopher and futurist R. Buckminster Fuller says "Humanity is acquiring all the right technology for all the wrong reasons". It is only when they go wrong that machines remind us how powerful they are. However, these human inventions move societies backward rather than forward

Artificial Intelligence increases social inequalities among human beings. It increases the gap between rich and poor. For example, A.I.-powered health care centres and hospitals rise their costs and poor people can't afford those hospital expenses. In public or civil hospital people are dying due to lack of equipments, medicines and machines. When we come to education system, it also widens the gap between private and public schools. Now schools and Universities become commercial entities where elite students get their degrees ~~at~~ at certain amount.

There are some effective steps to secure a bright future of humankind and Artificial ~~and~~ Intelligence. Firstly, encouraging innovations based public-private partnership to reduce unemployment. States should open up opportunities of jobs, through introducing skill development programs. The threat of joblessness must be uprooted because last year 87 million people lost their jobs but 97 million of jobs were created by Artificial intelligence in

different fields. Most of people are earning money through different E-commerce websites such as Amazon, Alibaba, and Daraz. The growth Industrial Revolution (4IR) technologies are expected to create up to 3.7 trillion in value by 2025 (PwC's Global Artificial Intelligence). There is need of how bolster the reskilling evolution and train the workers that they can fulfill the demands of 21st century.

Secondly, the robust checks and balances must be ensured on the usage of social media. Now it becomes difficult to create difference between true and authentic and manipulating content. People are being trapped because they believe in what they see or hear, for example, there are more than 500 websites made by RAW, Indian agency, against Pakistan. These websites are degrading Pakistan's image in all over world. On the other hand, former President of USA Donald Trump claimed Russian involvement in his electoral voting campaign. However, the adverse usage of A.I

is not less than a nightmare. So, stringent steps should be taken to neutralise the threat.

Thirdly, the exponential surge in innovations are blessings, if it ensures peace and developments. Advancement brings a lot of opportunities which change the life. But when these ^{are} going in wrong directions then these blessings transform into curse. What we are witnessing today is what was fashioned in previous decades - weaponised arm race, balance of power and tries to counter one another's power. Despite knowing ramifications of detrimental weapons, we are investing billion of dollars in nuclear weapons. These weapons can destroy whole world within the blink of eye. Therefore, international organizations, UNO, OIC and E.U must keep their checks and balances over industries and ensure that new advancements and innovation strengthen peace and prosperity in the world.

Fourthly, states need to re-route their energies towards declining the

inequalities between developing and developed nation. These inequalities are bolstered by bringing innovations and developments, because economical giant leaders (states) "ruling over the less developed countries. There is dire need to uproot these evils and ^{poor} providing to provide opportunities to developing nation that they can also bring development and advancements within their states. "Artificial Intelligence will have a more profound impact on humanity than fire, electricity and the internet" (Sundar Pichai, the CEO of Alphabet Inc.). The essence of humanity must be prioritize because it is sine qua non for stability and development. It is only possible, when gap between rich and poor is declining.

Therefore, machines and humans have been working together for more than a century. It's not a new concept. In fact, since the first machine was invented people have been creating more advanced machines. The multi-talented artist Al Bolisk says "Do you realize if it weren't for Edison we'd be watching TV by

candlelight? It sees it as a sign of necessity because with the passing time needs and demands are increasing and AI and humans are and will be worked together to fulfill demands of the time.

In a nutshell, technological advancements have helped human beings in every sphere of life but also have moved societies backward in socio-economic and cultural domain. Hence, it is essential to ensure peaceful and prosperous use of these inventions for the development of communities. For this purpose, strict controls and checks on the misuse of technologies must be ensured. As Stephen Hawking says: "A.I is good servant, but a bad master." The successful implementation of the mentioned measures is of great importance to ensure prosperity in the globe. Failing to do so would lead the whole world in socio economic and cultural anarchy.