Artificial Intelligence can be the Saviour of Human Race.

Outline:

A- Introduction

Artificial intelligence can be proven humanity's rescuer. This technology is ubiquitous in this era, and it has potential to revolutionise the world. So far, it has proved to be a useful tool in services of mankind. Advancement in this domain will further unleash its potential.

B- An Overview of Artificial Intelligence, and its perspectives.

C- How Artificial Intelligence can be proven Saviour of Humanity
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    ii- California's firefighters using AI to spot wildfire.
  2- Help fight pandemics
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  4- Enhanced security by crime detection
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5 - Increased efficiency and productivity
. i- Increase in labour productivity by $200 trillion
ii- Reducing time spent on tasks by 50 per cent

6 - Increased food production mechanism to counter malnutrition.
i- Making fundamental shift in agriculture, by tolerant and disease resistent crops.

7 - Achieving social equality by access to everyone
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ESSAY

"No more hard work by 2023! No long drudgery, no long hours working, owing to the work of electricity". This was prediction of future made by Dr. Charles P. Steinmetz, a century ago in 1923. He believed that by 2023 advancement in technology would increase efficiency to the point where people would no longer need to work long hours. This has been made true by technology and taken to ultra level by artificial intelligence. Artificial intelligence is controlling force, and have capibility to significantly help mankind in future. It is helping in fight against natural disasters, and

to counter pandemics. It has brought great reforms in field of medicine and surgery. The crime detection mechanism of artificial intelligence is helping to curb henious criminal activities and enhancing security. By the help of artificial intelligence production and efficiency has been increased, especially the production of food. It is also endeavouring to achieve social equality by providing easy access to everyone. Artificial intelligence has surpassed the efficiency of human work by reducing human error and round the clock availibility. Although its contribution is evident, but there are certain hinderances in its way to become emancipator for humanity. Like, it is slowly resulting in decline to human dominance. AI-generated deepfakes are causing social and political disruptions. Recent surge in job displacement is attributed to artificial intelligence. Also, the continuous surveillance has resulted in lack of privancy. Artificial intelligence can be proven humanity's rescuer. This technology is ubiquitous in

this era and it has ability to revolutionise the world. So far, it has proved to be a useful tool in the services of mankind. Advancements in this domin will further unleash its potential.

Artificial intelligence as a technology emerged in the later half of 20th century. John McCarthy first coined the term AI in 1956, as the science and engineering of making intelligent machines. It is used to describe the use of computers and technology to stimulate intelligent behaviour and critical thinking comparable to human beings. The father of modern computer science, 'Alan Turning' said: "artificial intelligence refers to tasks being performed by machines such that it computes anything that is compatible and gives results which can deceive us into believing it was a humans' output". In the case of Pakistan, it established the National Center of Artificial Intelligence in 2018 with an aim to foster scientific research, innovation, redirection of knowledge to the local economy, and training in AI and affliated fields.

Artificial intelligence has become a hot topic of debate, since its interference and inclusion in nearly every field of life. To some, it may be considered a saviour, while other regard it a monster. It has potential to be the emancipator of human race, which is discussed in the following paragraphs.

Artificial intelligence is helpful to human in their fight against natural disaster. Recent few years have seen surge in the occurance of natural disasters. World Meterological Organisation says that, "nearly 12000 extreme weather, climate and water related disasters happened in last half century". Recent few climate disasters were unprecedented floods in South Asian region and pacific Islands. Artificial intelligence provides certain guidance and strategies to cope with these disasters. Along with floods, wildfires were also notable in different regions of the world. The mainly affected areas were Brazil, Canada, Greece and United States. United States is seeking help from AI to counter wildfires. "California firefighters are using artificial intelligence to help spot wildfires, feeding video

from more than 1000 cameras that are strategically placed across state". [Daniel Tarrota, California turns to AI to help spot wildfires. August 2023] Thus, AI is helping mankind to avert losses of lives and livelihood.

Not only in fight against natural disasters, artificial intelligence is also helpful in fight against pandemic. The upheaval of covid-19 has shaken the world. The unprecedented turbulance was the test of world's advancement and preparation. Where all the strategies were of no use, artificial intelligence mucked in to help humans escape the disaster. It provided refined and fresh update, point out the areas with high frequency, and helped in maintaining lockdowns. AI-supported technologies, such as algorithms designed to help monitor pateints and AI-powered tools to screen COVID-19 pateints. Pakistan was also not far behind in the race. It has developed AI technology to curb the spread of pandemic, such as 'contact tracing app's' to send automated texts to people, if they were within an area of high number of cases

Students at 'Ghulam Ishaq Khan Institute' (GIKI) and 'Detect Now' created an AI algorithm "to secreen for Covid-19 through voice recognition by sensing a patient's dry cough". In this way, AI is helpful to paralyse the force of pandemic. The applications of AI are not just limited to pandemics, it has done wonders in the entire medical field. From diagnosis to treatment AI has been very supportive. AI-developed tools are being used to analyse CT scans, X-rays, MRIs and other images for lesions or other findings that a human radiologist might miss. Thus, it provides the better and effective diagnosis in certain complex cases. Robotic surgery has been proving very beneficial since its inception. Created with the help of AI, robots are very efficient and well organised. It is also best for personalised treatment plan for individual patients. "IBM Watson Oncology" is an AI system developed by IBM Corporation at United states. It helps oncologists to develop personalised treatment plans for

cancer patients by analysing their medical records and genetic data" Hence, AI is helping the humans to face medical adversaties.

Likewise, AI is also a helping hand in crime detection. Tradition methods are not enough to curb criminal entities. Police is therefore using AI-supported systems to enhance security. These includes facial recognition, voice sensing and fingerprint matching systems. These analyse- bodily movements, bone structure and clothing to identify individuals who exhibit unusual or suspicious behaviour. AI is also helpful in identifying cyber crimes, including fraud, money laundering, sexual offenses and religious extremism. Chatbots, powered by AI, can quickly and accurately respond to client inquiries. One such mechanism is adopted by Brussels Police. "Brussels Police has installed an automated software called 'Smart Monitor' that continuously scans all networks and systems for potential cybercrime activities" [Ammar Saleem, Artificial intelligence in Crime detection, July 2023]. So, the contribution of AI is significant to ensure security.

Also, artificial intelligence can increase efficiency and productivity of work. It uses network of machines and robots, thus it can do fine task. It is crucial element in driving technological advancement and enhancing human efficiency. "Artificial intelligence can increase global labour productivity by approximately 200 trillion dollar" [Mike Curcurito, The impact AI has on productivity and efficiency, March 2023] Global demands are increasing in every sphere of the work. AI can help in maintaining balance of productivity and utilisation cycle. It is possible to reduce time spent on tasks by 50 per cent or more. AI can automate and optimize internal processes, such as routing tasks, managing workflows, and improving communication leading to increased efficiency. Therefore, the productivity and effectiveness of work can be increased via artificial intelligence.

Moreover, artificial intelligence is also helpful to confront omnipresent challenge of malnutrition by expanding food production. Unavailibility of food has surged in recent few years, all over the globe. World Citizen Report demonstrates that, "in 2022,

an estimated 691 to 783 million people suffered from hunger". Rising population demands more food production from same resources. This conundrum can be tackled by artificial intelligence. AI ensures food security by making a fundamental shift in agriculture sector. It helps to develop food-tolerant rice, disease-resistent wheat and other crops that are more resilient to climate change. Kyriacos Koupparis, head of Hunger Monitoring Unit at World Food Programme says, "AI can be utilised in pretty much any sector to increase efficiencies and make forecasts, and food security is not immune to that". Thus, the artificial intelligence can be the Messiah in achieving food security.

In the same way, artificial intelligence can be supportive in achieving social equality by providing access to everyone. The major determinants of social inequality are indicators like, education, healthcare, food security, and life expectancy. Artificial intelligence can provide better facilities in these domains. The progress in AI guarantees the access of this technology to everyone. Mustafa Suleyman, co-founder and CEO of Inflection AI writes in his book, 'The

Coming Wave' that; "with further advancement everybody would have an AI assisstant in his pocket in the form of mobile or alike gadget". People across the globe will have equal access to this newfangled technology. AI-powered assisstive mechanism empowers individuals with disablities to participate more fully in society. Thus, artificial intelligence provides equal opportunities to the people to unleash their potential.

Likewise, artificial intelligence significantly reduces human error. AI a uses machines and robots. It works on the mechanism and directions of already stored information and certain algorithms. They ensure the accuracy and precision in data and then deducing conclusion from it. Human on the other hand, are subjected to make mistakes and unconcious errors. A research undertaken on human error by Oklahama State University on by the topic, 'human error: A concept analysis' states that "regardless of the activity and task being conducted, humans make between 3 to 6 errors per hour". AI analyses vast amount of data much faster and more accurately than humans, identifying

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patterns and trends that might otherwise be missed. It excels at handling tedious and error-prone tasks like data entry, calculation and document review. Thus, the chances of error are negligible with use of AI. Also, artificial intelligence certifies its round the clock availibility. It is the unique aspect of this technology. It provides services 24 hours a day without any interruption. It is because, these systems are not limited by human constrains, such as fatigue, sleep or time zone differences. The best application of this in customer services. AI-powered chatbots can provide immediate assisstance to customers any time of day or night, regardless of their location. AI systems are also beneficial in monitoring and security. They continuously monitor data for anomalies and threats. This can be help to prevent security breaches and other problems. Shalini Kapoor in her book, 'AI For You', writes that ; "the continuous care and support of AI makes it nothing less than a guide and a guardian". Hence, AI is at human services round the clock.

Besides these, artificial intelligence has imparted significant role in good governance practices. Process of good governance includes, managing the affairs of a country or an organisation in a fair, transparent and accountable manner. AI automation can help streamline administrative processes in government agencies, such as processing applications for permits or licenses. It can also help in improving decision making by analysing large amount of data and identifying patterns and trends. The country of Estonia is unique in this regard, with 93 per cent of country's population is inclined to e-governance using AI-powered tools. The importance of AI is in governance is emphasised by Estonian Minister of Information Technology: "In present time when it is more and more challenging to distinguish falsehood and truth — let us utilise AI in the right way to reverse those negative trends". In this way, AI has important contribution in governance.

We have discussed the capibilities of AI technology, which can make it the saviour of humanity. Although its contribution and impact is glaring, but there are certain setbacks to

AI being emancipator of human race. These drawbacks of AI are given in following paragraphs. Artificial intelligence is a threat to human dominance, as it is causing its decline. Its critics are skeptical about the view that, advancement of this technology will put an end to human superiority. Humans are the rulling specie of the planet. Artificial intelligence will put robots and intelligent machines in charge of world order. It is already affecting human supremacy, and is not clear how quickly or to what extent it will affect human society. Yuval Noah Harari, an eminent critique of AI writes that; "the rise of AI so much is the end of human history, not history, but human dominated history; as power is shifting away to intelligent alliens". But it is not true entirely, as artificial intelligence can never surpass human. It is a man-made technology and is completely under control. Artificial intelligence are mere tools, and they work on the basis of information provided to them. "AI are not autonomous tools by default. These capabilities not just naturally

emerged. Challenge for us is to precise and careful in use" [Mustafa Suleyman, The Coming Wave, 2023]. Therefore, it is not possible for artificial intelligence to dominate humans, unless they theirself want so.

Secondly, the social and political disruption caused by AI-generated deep-fakes hinder its force to be the saviour of mankind. These deepfakes include edited image, manipulated videos, and tempered voice recordings. These can easily deprive a person from of its respect and position. Artificial intelligence can be used to disrupt political compaigns and electoral manifestos. "The most serious challenges from AI-generated deepfakes will ultimately manifest itself in the shape of weakening and demolishing democracy" [Aqdas Afzal, Shackling Artificial Intelligence, September 2023]. It can cause an international conflict. Brooking Institution published a report, 'Deepfakes and International Conflicts' by Daniel L. Bayman on the linkages between AI and international conflict. But again, it is not the technology that is wrong, it is the people who use it wrong way. Regarding artificial intelligence, it is human duty to use it responsibly

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as it is under human control. For instan, AI can be compared to seesaw. Seesaw is an useful tool for cutting woods and alike purposes, but it can be used to harm people. What's wrong is not with seesaw, but the user. Similarly, artificial intelligence is a tool and responsibility comes to humas for its careful and appropriate use.

Thirdly, artificial intelligence is continuously resulting in job losses. This trend is increasing with progress of this technology. Artificial intelligence is capable of doing man's work with little or no efforts. It has reduced the use of man-power in certain areas of work like data entry, and those which need repitition of task. AI is already having a significant impact on workplace and it is likely to have even greater impacts in the future. A study by Mckinsey Global Institute in 2019 found that; "upto 800 million jobs worldwide could be lost to automation by 2030". If AI causes job losses, working class will have to suffer. In such a case, AI would not be able

to reach position of humanity saviour. But the truth is that, artificial intelligence cannot substitute humans. An American computer scientist, Fei Fei Li says that; "artificial intelligence is not a substitute for human intelligence". However, AI has capability to create more job opportunities. Its progress in various spheres of life allows it to provide humans with more employment chances.

Lastly, artificial intelligence results in lack of privacy by continuous surveillance. AI systems are trained on massive amount of data which can include personal information such as name, addresses and online activity. These systems can use this data to track or monitor individuals, even without their consent. This causes a rise to ransom cases. "An AI-powered ransomware attack targeted the hotel and casino chain MGM resort this month, all their systems were brought down and credentials of customers were shared" [Rafia Zakria, Growing ransomware attacks, September 2023]. The constant monitoring can create a chilling effect on free speech and behaviour, as individuals may feel pressure to conform to

perceived norms. This creates a phobia in people against AI, which is a complication for it, being in becoming a liberator of mankind. Actually, the continuous surveillance and monitoring are necessary for security concerns and regulations. Governments, businesses, and individuals are increasingly using AI-powered surveillance technologies, raising to ensure security. The safe city projects by government of Pakistan are equipped with AI technology. The video feeds from cameras help them locate disruption in the city. In this regard responsibility lies with individuals to make informed choices about their data privacy.

In a nutshell, one may say that, artificial intelligence has gained so much influence that, it has become part of our lives. It is ubiquitous, and its potentiality canno be denied. It can be declared saviour of human race, due to its services in fighting floods and wildfires and countering covid-19. AI has revolutionised the medical field by robotic surgery and advanced diagnosis. It is helpful in tracing criminal entities. AI is reforming the agriculture sector by ensuring surge in productivity. AI has

reduced the time spent on work by improving efficiency. AI provides equal opportunities to everyone, and provides customer services round the clock. AI is free of human constrains like sleep and fatigue. It has also transformed the governance practices. Estonia is helping from AI-powered technology, and their governance is regarded examplary, with 93 percent of people adopting digitalisation. In this way, AI can become champion of human race, but it has glaring drawbacks. Progress in AI is causing decline to supremacy of man. It can cause disruption and international conflicts pertaining to AI-generated deepfakes. Millions of people can lose their jobs due to interference of AI. But, AI is a mere technology, that works on integrated information. AI has force, the use of which, positive or negative, depend on people who use it. Yet it is in development phase, it will further brings its predicted results. It will go along with humans in future, as Sundar Pichai said, "Artificial intelligence will be part of our future, It is inevitable".