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# **Artificial Intelligence**

Surya Mohan Kumar, "Raghavendra Prasad"

Amity University Chhattisgarh

## Abstract-

Artificial intelligence has been studied for decades and remains one of the most puzzling subjects in computer science, its most powerful technology for humanity, where we now live in the age of massive data, an age in which we can collect huge amounts of information that hinder the person & #039, s process. Artificial intelligence has already been fruitful, In many industries such as technology, banking, marketing, and entertainment. Artificial intelligence is a science that has changed our lives already. In this paper, artificial intelligence was including concepts, methods, applications, and integration. At the same time, the definitions and methods of artificial intelligence were summarized. In the end, the structure and classification of AI and its related fields and application areas were introduced in detail. A total of 27, 451 papers that were published between 1977 and 2018 (84.6% were dated 2008-2018) were retrieved from the Web of Science platform. The descriptive analysis of data examined the publication volume, and authors and countries' collaboration. A global network of authors' keywords and content analysis of related scientific literature highlighted the use of major techniques, including Robotic networks, Artificial intelligence, and Natural language process, and their most frequent applications in the Clinical Prediction and Treatment of patients. The number of cancer-related publications was the highest in number, followed by heart diseases and Stroke, Vision impairment, Alzheimer's, and Depression. Moreover, the shortage research of on applications for some high-burden diseases suggests future directions in AI in core research. This essay will also briefly examine the problems with artificial intelligence in the field of medicine, demonstrating that weak AI may even be preferable to strong AI in the context of healthcare. Humans would still play a crucial role in the delivery of healthcare, but in many cases, less expensive, purpose-fit healthcare personnel might be taught to "fill the gaps" left by less competent AI. Thus, the doctor's function as a pricy problem-solver would become redundant.

# **Keywords**

Artificial Intelligence, Medical Professional Support, Remote Medicine, Patient Engagement, Sensor

## .1) Introduction -

(AI) is a computer or computer-controlled robot to perform tasks commonly associated with intelligent beings. The term is frequently applied to the project of developing systems endowed with the intellectual processes characteristic of humans, such as the ability to reason, discover meaning, generalize, or learn from experience. (Miller, 2019) Artificial intelligence (AI) is rapidly opening up a new frontier in the fields of business, corporate practices, and governmental policy. The intelligence of machines and robotics with deep learning capabilities have created profound disrupting and enabling impacts on businesses, governments, and society.(Goral ski & Tan, 2020) They are also influencing the larger trends in global sustainability. As the AI re- volution transforms our world, it could herald a utopian future where humanity co-exists here- ominously with machines, or portend a dystopian world filled with conflict, poverty, and surf-fearing. Presently, most definitions state that AI solves complex cognitive problems as so-cited with human intelligence, that AI helps as many people as possible through smartphones or healthcare, or even that AI recognizes problems and creates solutions for the benefit of technology, people, and society.(Vaishya et al., 2020) For example, CEO of IBM, Gianni Rometty, argues that AI technologies are "technologies to augment human intelligence...By and large, we see a world where this is a partnership between man and machine, which will improve us and allow us to do what the human condition is best to do". (Kaul et al., 2020)The terms AI and AI systems were first introduced in the 1950s. With the advancement of Big Data technologies, (Duan et al., 2019)e.g., improved computing storage capability and super-fast speed of data processing machines, AI is being revitalized with the availability and power of Big Data.

Artificial intelligence is a key emerging technology of the future, with seemingly limitless capabilities. It is referred to as general or super AI. Simultaneously it is continuously (Hill et al., 2015)receiving and monitoring data from how the vehicle is performing AI uses and classifies that data to see whether the scenario the vehicle is facing requires some type of interview and produces an output to the vehicle to navigate safely through the scenario it perceives. These limitations of a single-factor optimization process can be overcome by using empirical methods. In empirical methods, two approaches are possible, viz. statistical-based approach. (Lee et al., 2018)

These limitations of a single-factor optimization process can be overcome by using empirical methods. In empirical methods, two approaches are possible, viz. statistical-based approach and artificial intelligence-based black box approach. (Desai et al., 2008). We live, and the door to the future is wide open for how it will impact us in the future & Experts say there will likely be more discussions on privacy, security, and continued software development to help keep people's businesses safe as AI advance. (Attia et al., 2019) Artificial intelligence is transforming the way the world runs and will continue to do so as time marches. it appears that there are very limited academic re- search papers focusing on understanding the use and impact of the new generation of AI from the technology application perspective with rigorous academic investigation and theorization. Moreover, much current academic writing seems ignorant of what happened from 1970 to 2000 despite the availability of extensive publications. (Markakis, 2017). Siri, Alexa, and other voice recognition devices learn about you and your preferences, helping them know how to help you. These tools also utilize artificial intelligence to pull in answers to your questions or perform the tasks you ask. Things like plagiarism checkers and citation finders can help educators and students utilize artificial intelligence to enhance papers and research. (Levin et al., 2022) The artificial intelligence systems can read the words used, and use their databases to research everything they know in the blink of an eye. It allows them to check spelling, and grammar, for plagiarized content, and more. (Bini, 2018)Artificial intelligence's (A.I.) efforts in the last half-century. Model human use by computer has not been wildly successful while the idea of using human language in the country cate with computer holds merit, A. Scientists have, for decades, underestimated the complexity of human language, in both comprehension and generation. (Hill et al., 2015).

#### **Importance Of Artificial Intelligence**

Artificial intelligence's (A.I.) efforts in the last half-century to model human language used by computers have not been wildly successful. A.I. scientists have, for decades, underestimated the complexity of human language, in both comprehension and generation. (Jarrahi, 2018)The obstacle for computers is not just understanding the meanings of words but the endless variability of expression in how those words are collocated in the language used to communicate meaning. (Hill et al., 2015). Artificial Intelligence is mainly using our life, just like software, and devices, we can solve real-life problems very easily. While concerning for some individuals, voice assistants are always in listening mode and are activated upon hearing a keyword (also known as a 'wake-word') to commence its functionality (e.g., Okay Google, or hey Alexa). (Froese & Ziemke, 2009) Upon consuming the keyword, the device is ready to interact with its user and is activated upon hearing a keyword (also known as a 'wake-word') to commence its functionality (e.g., Okay, Google, or Hey Alexa). The device is ready to interact with its user upon consuming the keyword. (Mclean & Osei-Frimpong, 2019). Such as human future life create a Robot, and we can work in the environment of several human gallery raising – Artificial Intelligence opens the path to new technology new device & opportunity(Desai et al., 2008).

Many people are wary of AI inherently undermining accountability and stimulating the abandonment of rationality. Cautionary voices included cosmologist Stephen Hawking (Celin-Jones 2014), Microsoft billionaire Bill Gates (Mack 2015), and technology entrepreneur Elon Musk (Suleyman 2017) (Clarke, 2019).

#### 2) Literature review: -

#### Artificial intelligence in Medical Field Line -

Artificial intelligence is represented opportunities for future work to develop improved data flow between various elements of the digital health ecosystem. This will enable more widespread adoption and integration of artificial intelligence-based tools into clinical practice. Engagement and support from the ophthalmology community for standards development will be important for advancing this work.1 AIM has evolved dramatically over the past 5 decades. Since the advent of ML and DL, applications of AIM have expanded, creating opportunities for personalized medicine rather than algorithm-only based medicine. Predictive models can be used for diagnosing diseases, predicting therapeutic responses, and potentially preventative medicine in the future.2 AI may improve diagnostic accuracy, improve efficiency in provider workflow and clinical operations, facilitate better disease and therapeutic monitoring, and improve procedure accuracy overall. Artificial intelligence (AI) is a nontechnical, popular term that refers to machine learning of various types but most often to deep neural networks.3 Cardiology is at the forefront of AI in medicine. For this review, we searched PubMed and MEDLINE databases with no date restriction using search terms related to AI and cardiology. Articles were selected for inclusion based on relevance4. We highlight the major achievements in recent years in nearly all areas of cardiology and underscore the mounting evidence suggesting how AI will take center stage in the field. Artificial intelligence requires a close collaboration among computer scientists, clinical investigators, clinicians, and other users to identify the most relevant problems to be solved. 5 Best practices in the generation and implementation of AI include the selection of ideal data sources, taking into account common challenges during the interpretation, validation, and generalizability of findings, and addressing safety and ethical concerns before final implementation.6 The future of AI in cardiology and medicine, in general, is bright as the collaboration between investigators and clinicians continues to excel (Lopez-Jimenez et al., 2020).

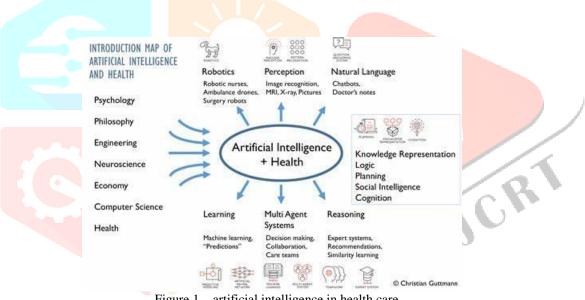


Figure 1 – artificial intelligence in health care

## History of artificial intelligence in medicine -

Artificial intelligence was first described in 1950; however, several limitations in early models prevented widespread acceptance and application to medicine. In the early 2000s, many of these limitations were overcome by the advent of deep learning. Now that AI systems can analyze complex algorithms and self-learning, we enter a new age in medicine where AI can be applied to clinical practice through risk assessment models, improving diagnostic accuracy and workflow efficiency. This article presents a brief historical perspective on the evolution of AI over the last several decades and the introduction and development of AI in medicine in recent years. A summary of the major applications of AI in gastroenterology and endoscopy is also presented, which will be reviewed in further detail by several other articles in this issue (Kaul et al., 2020).

## Artificial Intelligence in Agriculture -

Food shortage and population growth are the most challenges facing sustainable development worldwide. Advanced technologies such as artificial intelligence (AI), the Internet of Things (IoT), and the mobile internet can provide realistic solutions to the challenges that are facing the world. Therefore, this work focuses on the new approaches regarding smart farming (SF) from 2019 to 2021, where the work illustrates the data gathering, transmission, storage, analysis, and also, suitable solutions. IoT is one of the essential pillars in smart systems, as it connects sensor devices to perform various basic tasks. The smart irrigation system included those sensors for monitoring water level, irrigation efficiency, climate, etc. (Said Mohamed et al., 2021). The agriculture sector from different factors such as climate change, population growth, employment issues in this field, and food safety. It is important to acknowledge that biotechnology is also an important element in modern Agricoterral production as well as the importance of livestock production to the agricultural economy. However, due to the length limit, the scope of this article will focus strictly on information technologies that crop production. Agriculture automation is the main concern and emerging subject for every country. The world population is increasing at a very fast rate and with an increase in population the need for food increase demand and so they have to hamper the soil by using harmful pesticides in an intensified manner. This affects the agriculture practice a lot and, in the end, the land remains barren with no fertility. (Jha et al., 2019) The Systems of Artificial Intelligence (SAI) can be deemed subjects of law. This aim is formulated according to the technical capability- ties integrated into SAI and the SAI's ability to interact independently with other legal subjects. SAI features, such as direct connection with intellectual skills, and the ability to understand, learn and make autonomous decisions may cause situations where autonomous systems based on AI will make decisions that will be in the best interests of individuals, (Grigiene, 2017). The method segments citrus le- Sion spots with optimized weighted segmentation method uses colour, texture, and geometric features and carries out feature selection with dimensionality reduction, entropy, and skewness-based covariance vector; finally, it classifies the samples with a support vector machine. The method is tested on the citrus disease image gallery dataset, plant village, and a local dataset, and is capable of detecting anthracnose, black spot, canker, scab, greening, and melanosis. (Cruz et al., 2019). Artificial Intelligence techniques in agriculture and their importance. The United Nations FAO (Food and Agriculture Organization) states that the world population would increase by another 2 billion in 2050 while the additional land area under cultivation will only be 4% at that time. In such circumstances use the latest technological solutions to make farming more efficient. A direct application of AI or machine intelligence across the farming sector could act to be the epitome of a shift in how farming is practiced today. Using Artificial intelligence, we can develop smart farming practices to minimize the loss of farmers and proved them with high yields. A farming solution that is AI-powered enables a farmer to do more with less, enhancing the quality and also ensuring a quick (GTM) go-to-market strategy for crops. The current paper throws a vision of how the diverse sectors of agriculture can be fuelled using AI. It also investigates the future of agriculture and the challenges ahead. Agriculture is one of the biggest concerns to all mankind since most of the food is produced by agriculture. At present, many people still suffer from hunger due to a lack of food in some countries, especially in Africa. Especially, suffering from hunger caused chronic under our- ismene in more than 800 million people in the world in 2016. More notably, more than 10 million people died from hunger per year. (Bu & Wang, 2019). Artificial Intelligence in Agriculture is an international, Open journal, publishing original research, reviews, and perspectives on the theory and practice of artificial intelligence in agriculture, food, bio-system engineering, and related areas. (Singh, 2019). The farmers face great difficulties in changing from one disease control method to another. As naked-eye observation to detect and classify diseases is very expensive various plant diseases pose a great threat to the agricultural sector by reducing the life of the plants. There are three steps where first is capturing the images then Filtering and last segmentation using the median filtering method. After segmentation features are extracted for the classification of diseases. the effect of leaf area, soil moisture, mulching fraction, and leaf senescence on ET and parameterized and validated the model by using the measured ET from EC systems in an irrigated maize field with mulching of northwest China, a good agreement was found between ET estimated by the modified P-T model with measurement for both of half-hourly and daily time scale. Nevertheless, many input parameters of direct models cannot be easily obtained, therefore the wide application of the direct models has limited the applicability of AI approaches for actual crop evapotranspiration (ET) remains uncertain, especially in plastic mulched croplands. The objective of the present study was to evaluate the applicability of two different artificial intelligence approaches, including support vector machine (SVM) and artificial neural network optimized by genetic algorithm (GANN), in actual ET in a rainfed maize field under non-mulching (CK) and partial plastic film mulching (MFR). A field experiment was conducted for continuous measurements of ET, meteorological variables, leaf area index (LAI), and plant heights (he) under both CK and MFR during the maize seasons of 2011–2013. The meteorological data containing minimum, maximum, mean air temperature, minimum, maximum, mean relative humidity, solar radiation, wind speed, and crop data including LAI and he during maize growing seasons of 2011–2012 were used to train the SVM and GANN models by using two different input combination, and data of 2013 were used to validate the performances of the models. The (Singh, 2019). It has been reported in research that the drought-induced conditions developed seasonally in the event of El Nino (also known as the warm phase of El Nino Southern Oscillation, ENSO). El Nino is induced by the reduction of trade winds and, in tandem with the increase of earth surface temperatures, appears to occur on average, every 3–4 years. frequencies and intensities; characteristics that are not easily de-ermined effectively using empirical relations. Artificial Neural Networks (ANN), Fuzzy Logic (FL), and Support Vector Regression (SVR) are examples of AI models that can be used to forecast the time series based on historical data. The wavelet transform is defined as a time-dependent approach that decomposes the data series in the time-frequency space by providing a time-scale re-presentation of processes and their connections. The original time series is decomposed into two components, a high-frequency (high-pass) component, and a low-frequency (low-pass) component. Unlike the Fourier transform, the DWT localizes a time series both in scaling and space and has some other components where the wavelet function can be more rapidly compared to a similar Fourier function (Kanika et al., 2012). India is an agrarian country, and a major part of its economy depends on the agricultural sector. The share of agriculture in the Indian Gross Domestic Product and total exports and 16% and 10% re-sportively. About 75% population of India depends on the agricultural sector either directly or indirectly. Therefore, disease-free good quality or indirectly. Therefore, disease-free good quality or indirectly. Therefore, disease-free good quality crop production is essential for the growth of the country's economy.(Beedi & Gole, 2021).

#### Artificial intelligence in global warming essay -

Climate change is the biggest challenge facing the planet. It will need every solution possible, including technology like artificial intelligence. Dynamic cooling and heating load forecasting of heating, ventilation, and air conditioning (HVAC) systems are a basis for optimizing the operation of HVAC systems and can contribute to achieving effective management for the HVAC systems. This paper proposes a load forecasting method for office buildings based on artificial intelligence and regression analysis, including wavelet transform, support vector machines (SVM), and partial least squares regression (PLS). An office building located in Tianjin; China is taken as the building case study to validate the proposed model. For selecting the input variables, the methods of sensitivity analysis and correlation analysis are used. (Glover & Greenberg, 1989) The results of different worlds depend solely on conventional energy sources, for example, coal, natural gas, and crude oil. In addition, the demand for energy use is growing every day, which, however, results in a brisk demand for the usual fossil fuels. Whereas these sources of energy are limited and unload quickly, that in turn pressures the stability of potential generations of energy demand. In addition, the un- predictable supply of the aforementioned sources and the negative influence on the administrative balances between energy (petroleum) exporting/importing nations warrants vital investigations on the prospects of popular means for producing energy. In recent years, global warming and climate change are two main important issues in the global economy and environment, and they have had a considerable effect on the insufficient accessibility and rising cost of energy. (Zaharie et al., 2016) Buildings consume a substantial share of global energy consumption. Therefore, substantial energy savings can be realized by buildings that are properly designed and operated. Heating load (HL) and cooling load (CL) are measures of energy that must be added or removed from space by a heating ventilation and air conditioning (HVAC) system to provide the desired level of thermal comfort within the space. Therefore, early predictions of building CL and HL can help engineers design energy-efficient buildings. The artificial intelligence (AI) inference model has recently proven to be a viable alternative approach to predicting EPB. AI is employed to develop models that simulate the human inference processes. Thus, AI can infer new facts from previously acquired information and can adaptively change in response to changes in historical data. Asanas and Xara stated that AI not only obtains solutions very quickly but also assists building designers in analysing the influence of input parameters. Many studies have explored the use of AI models for predicting various interests in the context of EPB.(May Tzuc et al., 2021) However, most works have reported unsatisfactory error rates, and most have considered only a few factories that affect building energy use. (Chou & Bui, 2014) although the extent of their utilization was underestimated as smartphones are now being used widely. For instance, the ease of accessing and downloading scientific articles on one's computer in his/her office or home would have seemed like science fiction back in 1995, when finding such articles required spending many hours in the library (often in its basement for older publications) and making photocopies to keep them for later use. (Weng et al., 2019) Moreover, having access, from one's smartphone or tablet to news from anywhere in the world, being able to subscribe to digital services, obtain weather forecasts, purchase games, watch movies, make payments using smartphones, and a plethora of other, useful applications was greatly underestimated, while the extensive use of the cloud for storing large amounts of data for free was not predicted at all at

that time.(Drury et al., 2017) Even in 1995 when the implications of Moore's law leading to increasing computer speed and storage while reducing costs were well known, nevertheless, it was hard to imagine that in 2016 there would be 60 trillion web pages, 2.5 billion smartphones, more than 2 billion personal computers, and 3.5 billion Google searches a day(Markakis, 2017). AI is an intelligent machine with stable, robust, strong learning and analytical capabilities, as well as adaptive capabilities that have been applied successfully to many areas of science and engineering. AI combines science and technology which include cloud computing and big data to deal with complex dynamic nonlinear phenomena. (Polatajko et al., 2021) Dai et al. put forward a genetically optimized inverse model proportional-integral-derivative controller based on support vector machines for regression algorithm. It is named the GO-SVR-IMCPID controller, which can control the nonlinear grain drying process very well. artificial intelligence technology can assist the efficient physical field to control the drying of fruits and vegetables, and what problems can be solved in the process of efficient physical field drying by different artificial in-intelligence technologies. (Chen et al., 2020). Artificial intelligence (AI) is increasingly finding its way into many segments of people's lives. AI is intended to simplify people's lives and support them in a variety of situations. The study examines which influencing factors play a role in the behaviour of products containing or using AI an established approach in research on the acceptance of new technologies is the technology Acceptance Model (TAM).(Gasser & Reich, 2021). The three terms' definitions have some minor differences; however, since they are a result of the same technical ad noncement in the industry, they are used interchangeably throughout this paper. Industry 4.0 includes advanced and modern technologies and methods where small and medium-sized enterprises (SMEs) lack the resources and knowledge to utilize and set up a dedicated strategy for the transformation. (Jha et al., 2019)The identified characteristics were entrepreneurship, innovation, learning orientation, and power centralization (the leadership of one leader). Boeuf et al. identified four managerial characteristics of SMEs: short-term strategy, the importance of the SME manager, lack of expert support function, and short hierarchical line(Hansen & Bøgh, 2021). AI has become one of the main strategic directions for emerging internet technology companies., and achieves great consequences. For example, in the field of technological development, many Chinese technologies are in the international leading position, such as Baidu's face recognition, and speech recognition According to the "WIPO Technology Trends" released by the World Intellectual Property Organization (WIPO) in 2019, the United States and China are far ahead of other countries in patent applications in AI and related basic research. And, China has developed significant advantages in emerging deep learning technologies. while the development of AI not only helps people discover new knowledge but also assists people in effectively grouping what is already known. Consequently, these authors believe that the introduction of AI promotes different combinations of knowledge and significant economic growth. (Liu et al., 2020). AI approaches in combination with CFD solutions can noticeably decrease the computational cost and time in problems related to nanofluids. It is noteworthy that there is no review paper on AI applications in nanofluids thus far and therefore, the present paper is the first systematic survey on new advancements of AI approaches in the field of nanofluids.(Wang & Srinivasan, 2017) A complete set of AI methods that are employed for nanofluids is reviewed by emphasizing benefits and limitations. A neural network is created by a set of tiny separately interconnected processing components. Information is transferred via these components using interconnections. Each incoming connection possesses two magnitudes related to it, including an input magnitude as well as a weight coefficient. The summation develops the output of each unit. (Bahrani et al., 2019). Artificial intelligence (AI) techniques are becoming useful as alternate approaches to conventional techniques or as components of integrated systems. They have been used to solve complicated practical problems in various areas and are becoming more popular nowadays. (Levin et al., 2022) They can learn from examples, are fault tolerant in the sense that they can handle noisy and incomplete data, can deal with nonlinear problems, and once trained can perform prediction and generalization at high speed.(Desai et al., 2008) AI-based systems are being developed and deployed worldwide in a wide variety of applications, mainly because of their symbolic reasoning, flexibility, and explanation capabilities. Biological nerve cells, called neurons, receive signals from neighbouring neurons or receptors through dendrites, process the received electrical pulses at the cell body, and transmit signals through a large and thick nerve fiber called an axon. In a similar way.(Mellit & Kalogirou, 2008).

#### 3) Discussion -

Artificial Intelligence refers to the intelligence of machines. This is in contrast to the natural intelligence of humans and animals. With Artificial Intelligence, machines perform learning, planning, reasoning, and problem-solving functions. Most noteworthy, Artificial Intelligence is the simulation of human intelligence by machines.

These machines can react to situations. A famous example can be Deep Blue, the IBM chess program. Most noteworthy, the chess program won against, the popular chess legend. This refers to understanding others. Above all, this means to understand that others have their beliefs, intentions, desires, and opinions. However, this type of AI does not exist yet. First of all, AI has significant use in healthcare. Companies are trying to develop technologies for quick diagnosis. Artificial Intelligence would efficiently operate on patients without human supervision. Such technological surgeries are already taking place. Another excellent healthcare technology is IBM Watson. First of all, AI has significant use in healthcare. Companies are trying to develop technologies for quick diagnosis. Artificial Intelligence would efficiently operate on patients without human supervision. Such technological surgeries are already taking place. Another excellent healthcare technology is IBM Watson. AI can greatly increase the rate of work in manufacturing. Manufacture of a huge number of products can take place with AI. Furthermore, the entire production process can take place without human intervention. Hence, a lot of time and effort is saved. The history of artificial intelligence (AI) is more recent and not as advanced as many politicians assume. The actual history is rather messy, but it tends to work out as follows. In the 1950s, a visionary mathematician named Norbert Wiener was testing a version of the Turing machine with a chess program. It worked Turing called it "computers that think." The machine became known as the first "universal" machine, and it allowed theorists to explore the ramifications of the computational universe. But it was too slow to accomplish its full promise. What makes the Turing machine so fascinating is that in theory, it can only achieve human-level intelligence because of a very specific device it uses to store its data. A personal computer could do the same thing, but it would need. Artificial Intelligence (AI) plays a vital role in boosting agriculture and farming thus helping agriculture-based economies to grow. Agriculture can take benefit from emerging technologies like AIbased Automated Robotic Systems to optimize irrigation, crop monitoring, farming, automate spraying and optimize the exercise of pesticides and herbicides. Many mobile applications are available that leverage the power of AI to facilitate farmers by offering a variety of functions from better trade opportunities to controlling and boosting the field's yield.

#### 4) Conclusion -

Artificial Intelligence has helped people create robotic and computer systems to make their businesses more economically efficient. Life was forever changed by AI because hhuman's cloud uses the assistance of machines to complete repetitive, dangerous, and difficult tasks. With the help of AI machines, people could use the assistance of machines to complete repetitive, dangerous, and difficult tasks. With the help of AI machines, people could get jobs done faster and easier. Businesses could improve manufacturing output, data processing, and customer service efficiency. AI is probably one of the most important turning points in the field of computer technology. The reason for the importance of AI is the increasing amount of skills AI machines can possess. The jobs that AI might take away are jobs that people shouldn't have to do. It gives people the opportunity to get a better education so they can get jobs they might enjoy more. In conclusion, AI is seen in many places in everyday life; in phones, computers, jobs, and many other things which have forever changed life and technology. Most scenarios about future AI are hypothetical, but AI presents us with existential questions. It shows that where science stops, philosophy and spirituality begin. If you want to write a conclusion on AI then first you understand AI and know about them. This may occur gradually as different brain regions become replaced over time, or it may occur as a result of a procedure. This strongly suggests a fundamental shift in the medical and healthcare industries, wherein physicians, nurses, and the rest of the multidisciplinary team would collaborate with those with higher IQs. A promising area of research and development, the use of artificial intelligence in clinical practise is developing as quickly as other contemporary topics like precision medicine, genomics, and teleconsultation. The development of AI cannot be separated from medicine, and the activity of doctors will be strongly correlated with AI. The best option for future liver medical treatment will be machine-assisted medical services.

#### 5) Reference -

- Attia, Z. I., Noseworthy, P. A., Lopez-Jimenez, F., Asirvatham, S. J., Deshmukh, A. J., Gersh, B. J., Carter, R. E., Yao, X., Rabinstein, A. A., Erickson, B. J., Kapa, S., & Friedman, P. A. (2019). An artificial intelligence-enabled ECG algorithm for the identification of patients with atrial fibrillation during sinus rhythm: a retrospective analysis of outcome prediction. *The Lancet*, 394(10201), 861–867. https://doi.org/10.1016/S0140-6736(19)31721-0
- Bahiraei, M., Heshmatian, S., & Moayedi, H. (2019). Artificial intelligence in the field of nanofluids: A review on applications and potential future directions. *Powder Technology*, 353, 276–301. https://doi.org/10.1016/j.powtec.2019.05.034
- Bedi, P., & Gole, P. (2021). Plant disease detection using hybrid model based on convolutional autoencoder and convolutional neural network. *Artificial Intelligence in Agriculture*, 5, 90–101. https://doi.org/10.1016/j.aiia.2021.05.002
- Bini, S. A. (2018). Artificial Intelligence, Machine Learning, Deep Learning, and Cognitive Computing: What Do These Terms Mean and How Will They Impact Health Care? *Journal of Arthroplasty*, 33(8), 2358–2361. https://doi.org/10.1016/j.arth.2018.02.067
- Bu, F., & Wang, X. (2019). A smart agriculture IoT system based on deep reinforcement learning. *Future Generation Computer Systems*, 99, 500–507. https://doi.org/10.1016/j.future.2019.04.041
- Chen, J., Zhang, M., Xu, B., Sun, J., & Mujumdar, A. S. (2020). Artificial intelligence assisted technologies for controlling the drying IJCRT2306711 International Journal of Creative Research Thoughts (IJCRT) www.ijcrt.org g177

of fruits and vegetables using physical fields: A review. *Trends in Food Science and Technology*, 105(August), 251–260. https://doi.org/10.1016/j.tifs.2020.08.015

- Chou, J. S., & Bui, D. K. (2014). Modeling heating and cooling loads by artificial intelligence for energy-efficient building design. *Energy and Buildings*, 82(2014), 437–446. https://doi.org/10.1016/j.enbuild.2014.07.036
- Clarke, R. (2019). Why the world wants controls. *Computer Law & Security Review: The International Journal of Technology Law and Practice, xxxx*. https://doi.org/10.1016/j.clsr.2019.04.006
- Cruz, A., Ampatzidis, Y., Pierro, R., Materazzi, A., Panattoni, A., De Bellis, L., & Luvisi, A. (2019). Detection of grapevine yellows symptoms in Vitis vinifera L. with artificial intelligence. *Computers and Electronics in Agriculture*, 157(August 2018), 63–76. https://doi.org/10.1016/j.compag.2018.12.028
- Desai, K. M., Survase, S. A., Saudagar, P. S., Lele, S. S., & Singhal, R. S. (2008). Comparison of artificial neural network (ANN) and response surface methodology (RSM) in fermentation media optimization: Case study of fermentative production of scleroglucan. *Biochemical Engineering Journal*, 41(3), 266–273. https://doi.org/10.1016/j.bej.2008.05.009
- Drury, B., Valverde-Rebaza, J., Moura, M. F., & de Andrade Lopes, A. (2017). A survey of the applications of Bayesian networks in agriculture. *Engineering Applications of Artificial Intelligence*, 65(January), 29–42. https://doi.org/10.1016/j.engappai.2017.07.003
- Duan, Y., Edwards, J. S., & Dwivedi, Y. K. (2019). Artificial intelligence for decision making in the era of Big Data evolution, challenges and research agenda. *International Journal of Information Management*, 48(January), 63–71. https://doi.org/10.1016/j.ijinfomgt.2019.01.021
- Froese, T., & Ziemke, T. (2009). Enactive artificial intelligence: Investigating the systemic organization of life and mind. *Artificial Intelligence*, 173(3–4), 466–500. https://doi.org/10.1016/j.artint.2008.12.001
- Gansser, O. A., & Reich, C. S. (2021). A new acceptance model for artificial intelligence with extensions to UTAUT2: An empirical study in three segments of application. *Technology in Society*, 65, 101535. https://doi.org/10.1016/j.techsoc.2021.101535
- Glover, F., & Greenberg, H. J. (1989). New approaches for heuristic search: A bilateral linkage with artificial intelligence. *European Journal of Operational Research*, 39(2), 119–130. https://doi.org/10.1016/0377-2217(89)90185-9
- Goralski, M. A., & Tan, T. K. (2020). Artificial intelligence and sustainable development. *International Journal of Management Education*, 18(1). https://doi.org/10.1016/j.ijme.2019.100330
- Grigiene, J. (2017). Is it possible to grant legal personality to artificial intelligence software systems? \* erka a, Jurgita Grigiene. https://doi.org/10.1016/j.clsr.2017.03.022
- Hansen, E. B., & Bøgh, S. (2021). Artificial intelligence and internet of things in small and medium-sized enterprises: A survey. Journal of Manufacturing Systems, 58(August), 362–372. https://doi.org/10.1016/j.jmsy.2020.08.009
- Hill, J., Randolph Ford, W., & Farreras, I. G. (2015). Real conversations with artificial intelligence: A comparison between humanhuman online conversations and human-chatbot conversations. *Computers in Human Behavior*, 49, 245–250. https://doi.org/10.1016/j.chb.2015.02.026
- Jarrahi, M. H. (2018). Artificial intelligence and the future of work: Human-AI symbiosis in organizational decision making. *Business Horizons*, 61(4), 577–586. https://doi.org/10.1016/j.bushor.2018.03.007
- Jha, K., Doshi, A., Patel, P., & Shah, M. (2019). A comprehensive review on automation in agriculture using artificial intelligence. *Artificial Intelligence in Agriculture*, 2, 1–12. https://doi.org/10.1016/j.aiia.2019.05.004
- Kaul, V., Enslin, S., & Gross, S. A. (2020). The history of artificial intelligence in medicine. *Gastrointestinal Endoscopy*. https://doi.org/10.1016/j.gie.2020.06.040
- Lee, J., Davari, H., Singh, J., & Pandhare, V. (2018). Industrial Artificial Intelligence for industry 4.0-based manufacturing systems. *Manufacturing Letters*, 18(September), 20–23. https://doi.org/10.1016/j.mfglet.2018.09.002
- Levin, B. A., Piskunov, A. A., Poliakov, V. Y., & Savin, A. V. (2022). Artificial Intelligence in Engineering Education. *Vysshee* Obrazovanie v Rossii, 31(7), 79–95. https://doi.org/10.31992/0869-3617-2022-31-7-79-95
- Liu, J., Chang, H., Forrest, J. Y. L., & Yang, B. (2020). Influence of artificial intelligence on technological innovation: Evidence from the panel data of china's manufacturing sectors. *Technological Forecasting and Social Change*, 158(May 2019). https://doi.org/10.1016/j.techfore.2020.120142
- Lopez-jimenez, F., Attia, Z., Arruda-olson, A. M., Carter, R., Lerman, A., Luong, C., Medina-inojosa, J. R., Noseworthy, P. A., Pellikka, P. A., Red, M. M., Roger, V. L., Sandhu, G. S., Senecal, C., & Friedman, P. A. (2020). Arti fi cial Intelligence in Cardiology: Present and Future. 95(May), 1015–1039. https://doi.org/10.1016/j.mayocp.2020.01.038
- Makridakis, S. (2017). The forthcoming Artificial Intelligence (AI) revolution: Its impact on society and firms. *Futures*, 90, 46–60. https://doi.org/10.1016/j.futures.2017.03.006
- May Tzuc, O., Rodríguez Gamboa, O., Aguilar Rosel, R., Che Poot, M., Edelman, H., Jiménez Torres, M., & Bassam, A. (2021). Modeling of hygrothermal behavior for green facade's concrete wall exposed to nordic climate using artificial intelligence and global sensitivity analysis. *Journal of Building Engineering*, *33*, 101625. https://doi.org/10.1016/j.jobe.2020.101625

- Mclean, G., & Osei-frimpong, K. (2019). Hey Alexa Examine the variables influencing the use of Artificial Intelligent In-home Voice Assistants. *Computers in Human Behavior*. https://doi.org/10.1016/j.chb.2019.05.009
- Mellit, A., & Kalogirou, S. A. (2008). Artificial intelligence techniques for photovoltaic applications: A review. Progress in Energy and Combustion Science, 34(5), 574–632. https://doi.org/10.1016/j.pecs.2008.01.001
- Miller, T. (2019). Explanation in artificial intelligence: Insights from the social sciences. *Artificial Intelligence*, 267(July), 1–38. https://doi.org/10.1016/j.artint.2018.07.007
- Pallathadka, H., Mustafa, M., Sanchez, D. T., Sekhar Sajja, G., Gour, S., & Naved, M. (2021). IMPACT OF MACHINE learning ON Management, healthcare AND AGRICULTURE. *Materials Today: Proceedings, xxxx.* https://doi.org/10.1016/j.matpr.2021.07.042
- Said Mohamed, E., Belal, A. A., Kotb Abd-Elmabod, S., El-Shirbeny, M. A., Gad, A., & Zahran, M. B. (2021). Smart farming for improving agricultural management. *Egyptian Journal of Remote Sensing and Space Science*, 24(3), 971–981. https://doi.org/10.1016/j.ejrs.2021.08.007
- Singh, V. (2019). Sunflower leaf diseases detection using image segmentation based on particle swarm optimization. *Artificial Intelligence in Agriculture*, *3*, 62–68. https://doi.org/10.1016/j.aiia.2019.09.002
- Vaishya, R., Javaid, M., Khan, I. H., & Haleem, A. (2020). Artificial Intelligence (AI) applications for COVID-19 pandemic. *Diabetes and Metabolic Syndrome: Clinical Research and Reviews*, 14(4), 337–339. https://doi.org/10.1016/j.dsx.2020.04.012
- Wang, Z., & Srinivasan, R. S. (2017). A review of artificial intelligence based building energy use prediction: Contrasting the capabilities of single and ensemble prediction models. *Renewable and Sustainable Energy Reviews*, 75(September 2015), 796– 808. https://doi.org/10.1016/j.rser.2016.10.079
- Weng, S., Zhu, W., Zhang, X., Yuan, H., Zheng, L., Zhao, J., Huang, L., & Han, P. (2019). Recent advances in Raman technology with applications in agriculture, food and biosystems: A review. Artificial Intelligence in Agriculture, 3, 1–10. https://doi.org/10.1016/j.aiia.2019.11.001
- Zahraee, S. M., Khalaji Assadi, M., & Saidur, R. (2016). Application of Artificial Intelligence Methods for Hybrid Energy System Optimization. *Renewable and Sustainable Energy Reviews*, 66, 617–630. https://doi.org/10.1016/j.rser.2016.08.028

