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Evolution of Society through Artificial Intelligence: A Review

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Abstract: ***AI has been around for years. It is now gaining popularity in the tech world for two main reasons: big data sets and integration capabilities. In 2010 the Techonomic conference Eric Schmitt suggested that every two days now we are building as much information as we did from the beginning of civilization until 2003. Today, AI is currently being used in education, health care. Soon, smart machines will replace or improve people's skills in many areas, previously thought strongly within the human domain. for more than a decade, or sometimes even a hundred, for example, new buildings are usually designed to last 100 years. This study aims to examine the literature on the impact of artificial intelligence on society and its transformation.***
Keywords: Artificial Intelligence (AI), Impacts of AI, Problem solving through AI, ML and AI, AI-driven Tools

I. INTRODUCTION

Artificial intelligence is a transformative technology, working in the field of computer science and emphasizing the construction of intelligent machines that serve as speech recognition, learning, editing and problem solving, robots, games, modelling (Firschein et al., 1973)). AI is about making machines smarter so that they can think, work, and do human work. Currently, some of the examples of AI could be about playing computer chess in self-driving cars, based on in-depth learning and the natural learning process.

AI is becoming more and more popular with each passing day due to increased data volumes, improved algorithms and improved computer power and storage. Therefore, business people are increasingly looking for ways to make their products and services more intelligent with AI. Google's search algorithms are a clear example of an AI-driven tool. Amazon Alexa is one. Social media is also heavily dependent on AI. The current emergence of AI technology is not so shocking - or so clever. Instead, we continue to study modern-day examples of the practical wisdom of healthcare, marketing and more. In the near future, the goal of maintaining the impact of AI for the benefit of society promotes research in a wide range of areas, from economics and law to technical topics such as validation, relevance, security and control.

When considering how dangerous AI can be, experts have identified many possible scenarios in the future. Like unemployment, the labour community is very concerned about automation as we have developed ways to make jobs automatically. We can open the door for people to take on more complex roles, from the physical work that dominated the pre-industrial world to the work of understanding that reflects the work of strategy and administration in our global society. The inequality of our economic system is based on compensation, where the contribution to the economy is often assessed using hourly wages.

Most companies still rely on hourly work when it comes to products and services. However, by using artificial intelligence, the company can significantly reduce reliance on employees, and this means that revenue will go to fewer people. Therefore, people who own companies in AI-operated companies will make all the money. Destructive by nature, independent weapons are clever artificial intelligence systems designed to kill. In the hands of the wrong person, these weapons can easily kill many people.

In addition, the AI weapons race can lead to an AI war unknowingly and result in many casualties. Security with AI becomes very powerful as it can be used for no apparent reason. This applies not only to robots designed to carry human soldiers or private weapons but also to AI systems that can cause damage if used with malice. This study aims to understand and provide a summary of the impact of Artificial Intelligence on society.

II. METHODOLOGY

This study aims to look into the literature on the impact of artificial intelligence on society and its transformation. AI has recently taken its roots in the field of field. To cover various aspects of society, books have been downloaded in various fields where AI is used. These areas include health care, automotive, commercial, governance, defence, entertainment, computer-assisted counting, and sports. These topics are downloaded from peer-reviewed sources based on keywords that enhance AI role, prediction and impact assessment, AI behavioural and environmental factors, and AI-related relationships. Various reports from governments or their organizations are also reviewed and updated to set out their ideas, lessons, and steps to strengthen their position in the future led by AI.

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III. ARTIFICIAL INTELLIGENCE: IMPACTS

A. *Impact of Artificial intelligence on Economy*

The growing wave of adoption of Artificial Intelligence technology across all industries will boost significant growth over the next decade, as revenue for AI software will reach nearly $ 90 billion by 2025. The presence of AI is exciting for data scientists and business executives alike who want to allow machines to do the numbers. to make the business more intelligent at a holistic level. Advances in AI have been made possible due to the combination of three different, or related, developments (Ernst et al., 2018):

The dramatic decline in computer costs has led to an explosion of installed computer power and storage capacity. Simple smartphones today are much more powerful than the computer that brought the first person to the moon. Production costs for the iPhone 7, for example, are currently estimated at the US $ 220; in the 1980s it would have been about the US $ 1.2 million in modern terms to pay for the memory capacity of such a phone.

Second, the development and spread of Internet adoption and other forms of digital communication have led to a dramatic increase in the supply and storage of digital information, including cloud computing, which allows for the comparison and analysis of large amounts of data for statistical purposes needed to develop AI-based tools.

Finally, a significant reduction in the cost of digital technology significantly lowers the entry barriers for beginners, making it even more urgently necessary to raise large sums of money before starting a new business while at the same time providing a great start-up. benefits. This shift of business models to small, fast-growing technology companies has often been driven by spin-offs universities sponsored by new financial products and supported by the seemingly endless supply of highly trained software engineers. The paradoxical nature of digital innovation is that low entry barriers allow new players to break away from participants while at the same time quickly leading to new forms of industry-focused focus (Bessen, 2017).

The current wave of technological change-based (AI) technologies has created widespread fears of job losses and further rising inequalities in terms of potential productivity increases, including in developing countries, given the relatively low cost of other applications and increased productivity, especially among low-skilled workers. At the same time, the risk of further escalation of inequality must be addressed if the benefits of AI-based technological advances are widely shared. In this case, a skills policy is required but not sufficient. Also, new ways to control the digital economy are called for that prevent further escalation from market focus, ensure proper data protection and privacy and help share the benefits of productivity growth through a combination of profit sharing, revenue (digital) and deregulation. during operation. This paper requires a balanced and hopeful view of the opportunities and risks from policymakers provided with practical wisdom, and social partners consider some aspects of this new technology. (Méda, 2016).

However, many viewers are unsure. Many analysts apprise, that advances in both robots and AI in the next few decades could lead to significant job losses or job divisions and thus increase revenue and wealth divisions (Korinek & Stiglitz, 2017). A recent report by Bank of America Merrill Lynch in 2015 pointed to the potential for rising inequalities due to increased automation. The report cited a study by Oxford University, which found that up to 35 per cent of all UK employees, and 47 per cent of those in the United States, are at risk of technical dismissal over the next 20 years (Frey and Osborne, 2017). According to the World Bank (2016), in developing countries many more jobs are at risk: 69 per cent in India, 72 per cent in Thailand, 77 per cent in China and 85 per cent in Ethiopia.

B. *Impact of Artificial Intelligence on Ecological Studies (Environment)*

The field of ecology is large and varied around the analysis and statistics of development studies and technologies, which is why there have been results. The complexity found in various ecosystems has many challenges ahead of both you, researchers and administrators including large data collection and analytics, the availability of a wide range of space samples and the unexpected and ever-changing ability of organisms to evolve. Moreover, the scope continues to grow.

Because of the great challenge of the work itself, there has always been a wide range of tools that can help think about the environment rather than just help with data collection and analysis. The techniques found in AI and modelling have transformed ecology into both basic and practical studies and have played a major role in the development of the same. The implementation of artificial intelligence in ecology contributes to the obvious lack of transparency in the planning and analysis of comprehensive environmental information, which makes the whole process more efficient and treats data collection limitations. Researchers have been successful in using techniques such as professional programs involving information engineering, which could be referred to as the process of extracting and applying professional information to a computer program. (Coulson et al., 1987). The development of natural sciences due to AI includes "OOPS" I.e., object-oriented planning systems, which is a code-based system based on the representation of objects and building models that they use in a specific data structure using flexibility, understood by naturalists.

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Ecology is a qualitative study rather than quantitative research that is difficult to incorporate into mathematical principles (Brooks, 1999). Intelligence provides tools for the logical conversion of high-level information such as environmental relations into a computer-based evaluation form, which can be used to reach a quality decision. Limitations of artificial intelligence on environmental development will still be found, as the application is premature, and is expected to be unveiled in the next decade.

C. Impact of Artificial Intelligence on Agriculture

According to the United Nations Food and Agriculture Organization, the world's population will increase by 2 billion by 2050. Contrary to this only, 4% of the extra land will be cultivated at that time. Also, this will not be enough to feed the entire population. So in order to address the country's difficult problem of low productivity, agricultural development is a necessity. AI is very interested in transforming the current state of the old agricultural school environment.

AI technology can be used on a number of occasions such as harvesting, air surveillance, remote sensing, close proximity, pest and weed control and advisory services etc. At present, Microsoft is working to provide seed counselling, fertilizer application, and more. 175 farmers in Andhra Pradesh, India (Bagchi, 2019). This move resulted in a higher yield of 30% per hectare on average compared to last year. Harvest technology such as Harvest Croo has developed an independent berry picking machine in which AI mimics human intelligence. Israeli Prospera start-ups acquired in 2014 have developed a cloud-based solution that interacts between data labels and makes predictions on this information. There are a number of such examples where AI technology helps to make farming smarter and transforms the world. AI technology still faces funding problems and a lack of validation and only if these barriers are overcome, the current state of agriculture can change/improve.

D. Impact of Artificial Intelligence on Government

Artificial intelligence emerges as the most important asset to humanity. Similarly, it is useful to the government of any country and plays a vital role in our daily lives. A study, developed and established that AI is able to reduce administrative responsibilities, it helps to solve problems related to resource allocation. Many AI studies can be divided into five main categories:

1) Answering Questions
2) Filling Documents
3) Request Routing
4) Translation Process
5) Drafting Documents

Therefore, the categories listed above have greatly assisted government agencies in successfully completing operations. (More et al., 2017) Continuous development of AI can be seen as a way to drive the future of any economy in the age of modern technology that requires big data — Accenture estimates that AI has the potential to double its economic growth rates by 2035. However, every method is right and comes with a price. In the case of AI in the public domain, it can raise questions related to privacy questions about privacy, increased speed and the use of digital tools, and whether people can cooperate or maintain speed depending on the technology or not. Research is very different from receiving AI job alerts over the next 20 years in the range of 9 to 47%.

E. Impact of Artificial Intelligence on Education

As the world continues to invest in AI, it will affect the education system as well. As we have discussed previously, experts predicted that by 2025, artificial intelligence would create more jobs than ever clear areas, but new jobs created will require additional skills compared to old jobs. As new skills emerge, governments, educational institutions and employers need to consider how best to do it successfully develop learning programs that equip people with the skills they will need to retain
high and modern economy (Perisic, 2018).

Therefore, educational institutions will need to train students in the industry. Business discipline, such as accounting, auditing, finance, and marketing, can be challenging.

Lab Instructions with consistent and credible rules, policies, and procedures can be executed automatically (Siau, 2017). When conventional artificial intelligence (or solid AI) begins to emerge, students in higher education may be pursuing their own interests and robots now have their own interests (e.g., art, history, music, philosophy,
political science) as most of the jobs students are trained for!

Also, there is a need to focus on further research into the new role of teachers in new teaching methods, with a new set of qualifications for graduates, with a focus on imagination, innovation and innovation; I a set of skills and abilities that cannot be repeated by machines. (Popenici and Kerr, 2017).

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F. Impact of Artificial Intelligence on Innovation

Artificial intelligence has features that can help increase the efficiency of an existing economy. In addition, it can make a significant contribution to the “innovative” sector of the market.

These innovations have the potential to affect both the production and the variety of products and services offered by it. When we consider the case of "atomise" which is a new company that focuses on the identification of drug candidates using the neural network to demonstrate the bioactivity of certain molecules and the model of the atom shows two ways in which the use of artificial intelligence can. easily recognizable in the field of innovation. (Cockburn et al., 2018).

AI is also influential as it is economical and very accurate when it comes to technical matters as discussing or reading any point for a long time will eventually lead to a better understanding of the help that anyone can have an initial knowledge about. the work they are attempting to do.

G. Impact of Artificial Intelligence on Military and Defence

Artificial Intelligence (AI) is becoming an integral part of modern warfare. Compared to conventional systems, AI-armed military systems are able to handle large data volumes effectively.

Additionally, AI improves self-control, self-control, and accountability systems due to its natural computer, decision-making power. AI is used in almost every military application, and an increase in research and development funding from military research institutes to develop new and advanced forms of intelligence is expected to further the adoption of AI-driven programs in the military sector.

The skills available in AI have great potential for national security. For example, current machine learning technology can enable a high degree of automation in tasks that require more staff such as satellite imagery and online protection (Allen & Chan, 2017). For example, the US Department of Defence’s (DoD), Defence Advanced Research Projects Agency (DARPA) is funding the development of an underwater robot system, which is expected to be used in applications ranging from underwater mining to involvement in submarine operations.

In addition, US DoD as a whole has spent USD 7.4 billion on performance intelligence, Big Data, and clouds in the 2017 financial year, while China is betting on AI to improve its defence capabilities and is expected to become a world leader in 2030. Future advances in AI have the potential to become a flexible national security technology, equivalent to nuclear weapons, aircraft, computers and biotech. Market and market analysis shows that the market size of military intelligence is expected to reach USD 18.82 billion by 2025, at the CAGR of 14.75% from 2017 to 2025. Here are eight major military applications for which AI will prove its worth. in the years to come.

PWS or private weapons systems, another revolution in military operations. Although the Civil Society and the international community are concerned about plans, military planners and archers see potential help in the private sector, expecting to carry out activities in ways that people can or can help to save costs or reduce military power.

(Roff & Moyes, 2016). Questions arise about the degree of acceptance of private weapons in certain important functions such as the identification, selection and enforcement use of Targets. So, what comes as a conclusion is, there are pros and cons to the use of AWS in future military programs.

H. Impact of Artificial Intelligence on Healthcare and Medicine

The role of AI technology in health care and medical care leaves us with the difficult question of whether AI is simply an overused practice, or could assist physicians in delivering the desired results. AI in this field collects patients' knowledge by examining and interviewing them, analysing them and then helping to diagnose and treat diseases. It is very helpful in the treatment of cancer, neurology and cardiology.

The first use of AI technology in this field began in 1976 when Gunn used computer analysis to diagnose severe abdominal pain. (Ramesh et al., 2004) AI develops the ability to understand patterns and human needs in health care professionals. A start called sense.ly created a nurse Molly who helps monitor patients and their doctor visits (Novatio, 2019). AI also enhances data availability and growth in the development of analytical strategies. In 2016, Amazon's Alexa app was developed by Boston Children's Hospital which provides health information and suggestions for parents of sick children.

National health facilities have developed an AiCure app to monitor patient use of medication. These examples force us to believe that AI will play an important role in the future. Apart from these new processes, the biggest hurdle left is to close the gap between human knowledge and digital / AI data and to improve the decision to perform the process with AI technology like other doctors.

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I. Impact of Artificial Intelligence on Labour Market

There are many concerns about the impact of Artificial Intelligence and the labour market. According to a Pew Research Center study, half the experts (48%) believe that AI will remove more jobs than it will create and the other half of the experts responded to the study (52%).) expect technology to create more jobs than it will in 2025. (Smith & Anderson., 2014). The team also noted that the new jobs that will be created will require more skills than the current ones. Human interventions still required for the tasks that are difficult to automate and automize.

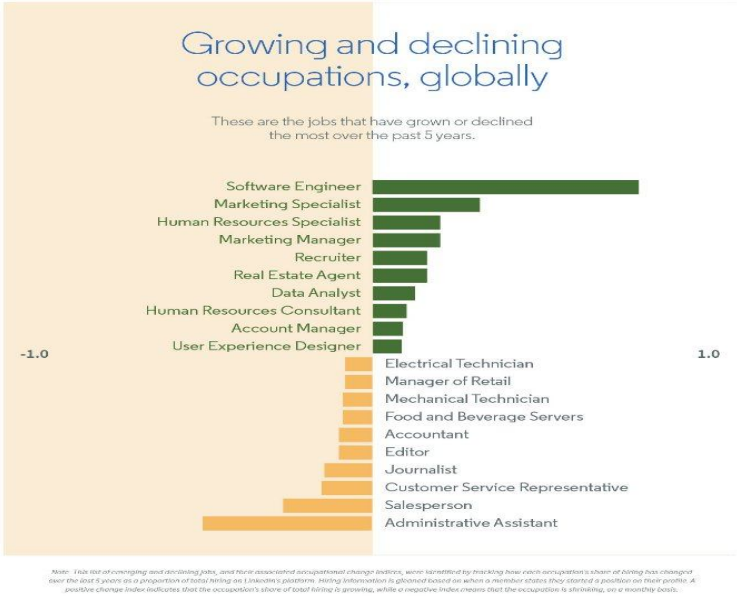


Fig. 1 Growing and declining occupations globally, *Source: Perisic (2018)*

While talking about Jobs, Tech jobs such as application engineers and data analysts are expanding across a wide range of fields, as well as technological capabilities such as cloud computing, mobile application development, software testing and AI.

However, part of the extremely "automatic" activity falls to the top 10 most diminished users - i.e., employment which has made the bulk of employment decline over the past five years. These services include administrative assistants, customer service representatives, refugees and electrical/mechanical engineers, many of whom rely on repetitive tasks.

It is estimated that by 2025, the value of machinery will increase from 29 per cent to more than 50 per cent — but those new demands will be accompanied by this rapid change in the labour market, which may result in more employment than less.

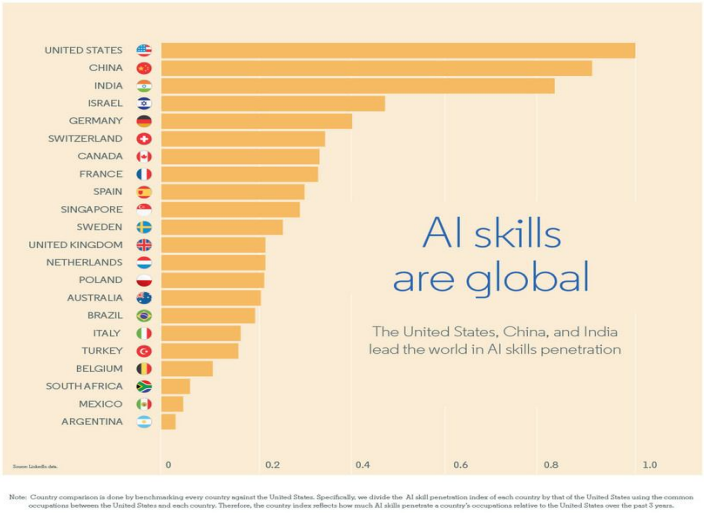


Fig. 2 AI skills are global, and the countries with the highest preformation of AI skills are the United States, China, India, Israel and Germany. *Source: Perisic (2018)*

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J. Impact of Artificial Intelligence on Manufacturing Industry

Artificial Intelligence (AI) is a psychological science with rich research activities in the fields of image processing, natural language processing, robots, machine learning etc. Historically, Machine Learning and AI have been seen as dark art techniques and are often lacking. of overwhelming evidence to assure the industry that these methods will work repeatedly and consistently and with the benefit of investment. At the same time, the performance of machine learning algorithms depends largely on the knowledge of the developer and his preferences. Therefore, the success of AI in industrial systems is limited. In contrast, Industrial AI is a systematic discipline, focused on the development, validation and implementation of various machine learning algorithms used by industry for stable operation. It serves as a systematic and disciplinary mechanism for providing solutions to industrial applications and serves as a bridge linking educational research findings to AI to industry workers. (Lee et al, 2018)

Key elements in Industrial AI can be identified by 'ABCDE'. These key features include Analytics (A) technology, big data technology (B) Cloud or Cyber technology (C), Domain know-how (D) and proof (E). Statistics are the core of AI, which can only bring value if other features are present. Big Data and Cloud technology are both important features, providing a source of information (data) and an Industrial AI platform. While these elements are important, background information and evidence are also important factors that are largely ignored in this context. The domain know-how is an important factor in the following aspects:

1) Understand the problem and focus on the strength of Industrial AI in solving it;
2) Understand the system in order to collect relevant and qualitative data;
3) Understand the physical meanings of parameters, how they are associated with the physical features of a system or process
4) Understanding how these parameters differ from machine to machine.

Evidence is also an important factor in validating Industrial AI models and incorporating accumulated learning ability. By collecting data and evidence patterns (or labels) associated with those patterns we can only improve the AI model so that it is more accurate, complete and robust as its age. (Lee, et al, 2018)

IV. CONCLUSION

Currently, Artificial Intelligence is making a significant difference in the industry. The habitual ways of doing business are changing. "Equipment, with a human-level ability" this idea is terrifying and exciting. This concept of state-of-the-art equipment is emerging and should be carefully monitored.

The ingenuity of the design and learning of the machine will be very much focused on. Therefore, the level of their interaction and involvement will be the subject of research in the near future. Overall, Artificial Intelligence and the Idea of Autonomy have both been major developments in the field of thought. In some cases, however, there is still concern about the safety of personal use. Information and Communication Technology (ICT) is the backbone of the new modern, digital world. Although in some cases, AI also raises concerns, such as side effects. As in the War, there has been discussion about setting limits on the use of autonomy. These technologies, even in social media and marketing, threaten privacy. Information and Communication Technology (ICT) is more integrated than ever. AI and its adoption will showcase state-of-the-art skills in defense and agricultural environments. The impact of AI on society is less than its effectiveness.

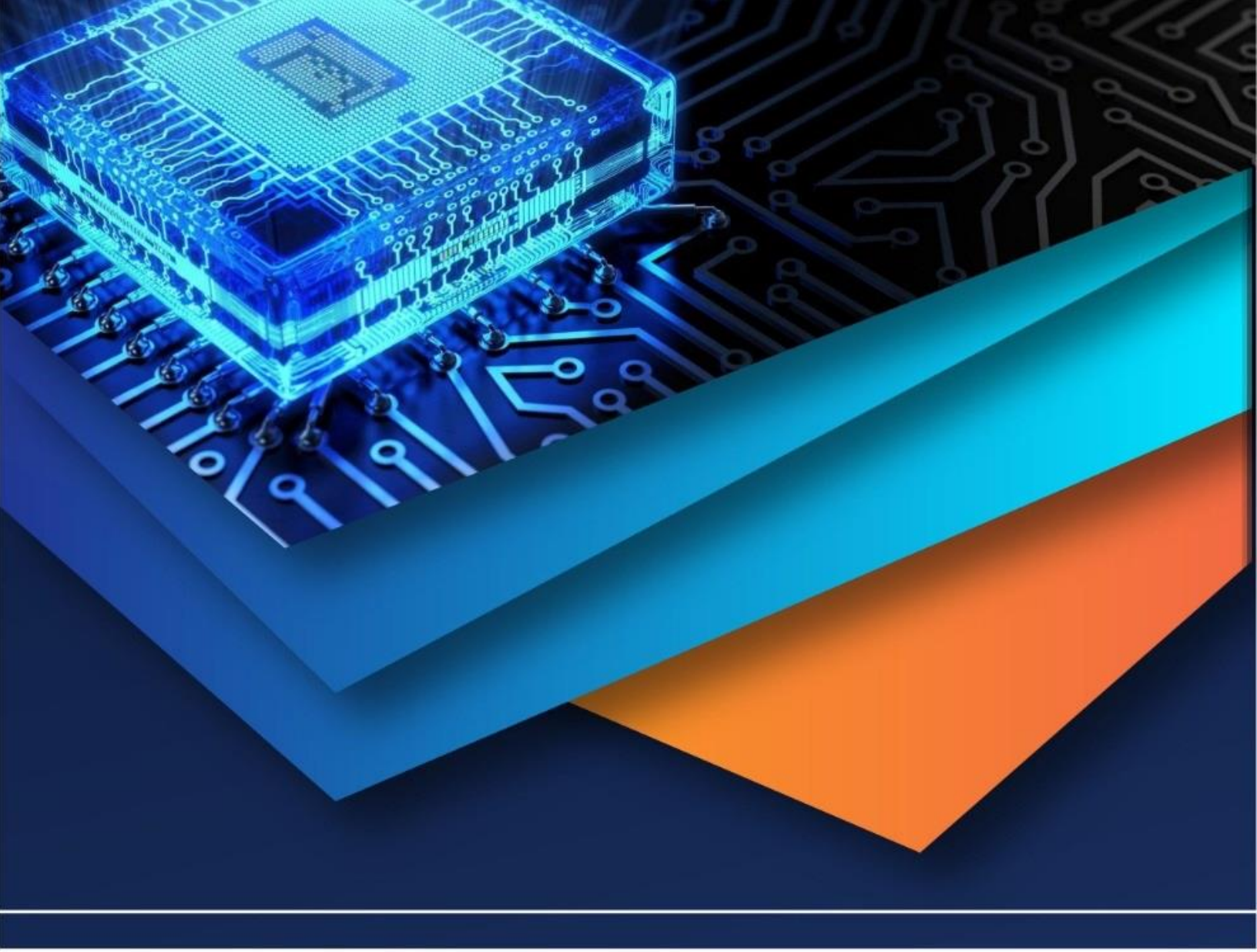
To conclude everything. Artificial Intelligence has been a turning point in every field I have studied. The use of AI has changed the methods common to almost everywhere in modern society.

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