NEW ALIPORE COLLEGE

E-MAGAZINE

Decoding the Future:

Navigating the Dynamics of Artificial Intelligence and Human Intelligence in an Interconnected World

Department of English

www.newaliporecollege.ac.in

A Few Words of Encouragement

Dr. Jaydeep Sarangi

Principal
New Alipore College

***From the desk of the Principal*:**

Life is speeding up. Artificial Intelligence is constantly changing our living world. AI's ability to analyze massive amounts of data and convert its findings into user-friendly visual formats can also accelerate the decision-making systems. AI has already taken the main driver seat of emerging technologies including robotics and IoT. On a far massive scale, AI is poised to have a major role on climate change, environmental parameters and sustainability projects. Tomorrow, AI will play a pivotal role for student's individual needs. The explorations are on. Media is harnessing AI tools too, and will continue to benefit from it. Apart from these sectors, AI has great prospects in manufacturing, finance, banking, entertainment, etc.

Editors of this issue have done marvels. Our students have written pieces from different perspectives/gazes poignantly. I thank the students of Women's Christian College and Scottish Church College for their wonderful submissions. The wide spectrum of the e magazine is a mirror of the college and it upholds the vision; include, ignite and innovate. I feel elated to see so many submissions for the current issue. Voices alight with unguarded wonder. This issue of the E-magazine will stimulate our students to use AI based systems for good. I will read your powerful thoughts, dear students. Blue dots in the distance begin to open up. Write to us regularly.

A Few Words of Encouragement

Dr Dhrubajyoti Banerjee

Associate Professor of English &
Coordinator, IQAC New Alipore College

With the introduction of every new generation of technology there is a reservation in the human mind as to whether this will replace the human predominance in all matters of importance. This is even more so in the field of Artificial Intelligence. Science Fiction like the Terminator series of movies are among the pioneers of the representation of a Dystopic World unleashed by a rule of powerful Robots. Human Beings have always congratulated themselves on being Intelligent and if this faculty comes in to the machines it is something worth serious considerations. It has memorably been pointed out that the human brain is capable to comprehending most of the external world but has not been able to know itself fully. By this logic the creation of an entity that can artificially emulate the complete functions of the human brain seems to be an almost impossibility.

But there are enabling propositions as well. Where does the boon become a bane or does it at all? Our E Journal always comes to the forefront to engage with various relevant issues in our lives. This issue also provides interesting perspectives on this matter which would predictably become life changing for all. I wish to congratulate all who have contributed to this issue.

Happy Reading and Active Thinking to all humans for whom Intelligence is never Artificial.

A Few Words of Encouragement

Dr Neela Sarkar

H.O.D, English Department
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In an era marked by rapid technological advancement, Artificial Intelligence (AI) stands at the forefront of innovation. From self driving cars to personalized recommendations on streaming platforms. AI has invaded every aspect of our lives.

At its core AI refers to the development of computer systems that can perform tasks typically requiring human intelligence. These tasks involve problem solving, experiential learning, pattern recognition and decision making. AI encompasses various subfield such as machine learning, natural language processing, robotics and computer vision.

AI's impact extends across diverse domains. From health care, to finance, defence, education and entertainment we can recognize the impact of AI.

It would be wise to remember that while AI promises immense possibilities it is not without pitfalls. We have to ensure ethical use of AI to enhance its evolution so that we can harness its potential to create a more informed, equitable and environmentally sustainable world. The articles in this issue explore in detail the various aspects of AI with competence and ingenuity.

At a time when youngsters are considered irresponsible lacking in discipline and disinterested in studies, it is indeed encouraging to see them engaging and applying themselves wholeheartedly to bringing out this issue of the e-mag, which is so well thought out and executed, more so when the students are from non technical streams. Just goes to show how invasive and all pervading is the impact of AI.

Best wishes.

Editorial Panel

Prof. Bulu Mukhopadhyay

ASSOCIATE PROFESSOR, ENGLISH
SECRETARY, TEACHERS' COUNCIL

Dr. Neela Sarkar

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Prof. Aditi Rudra

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From Editor's Desk

Greetings,

Embarking on an intellectual odyssey, we, the students of Sem 2 English Department at New Alipore College, Pratush Mondal and Tushar Bera, under the guidance of our mentor Prof. Aditi Rudra, Department of English, proudly present our E-MAGAZINE - a journey into the intriguing realms of AI and Human Intelligence.

In this exploration, we dare to question, challenge, and illuminate the stark contrasts between artificial intelligence and the unique capabilities of the human mind. Our magazine is a testament to the curiosity that fuels our academic pursuits.

This is not just a magazine; it's a testament to our collective curiosity and the boundless potential of the human intellect. This issue holds special significance as it features contributions from students of two distinguished colleges in Kolkata—Scottish Church College and Women's Christian College.
Let the exploration begin!

Prof. Aditi Rudra
Mentor & Guide

Pratush Mondal
Chief Editor, Graphics Designer & Writer

Tushar Bera
Creative Editor & Writer

Featuring Exclusive Articles from Two Distinguished Colleges -

Women's Christian College

&

Scottish Church College

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Unlocking the Mind: Understanding the Difference Between AI and HI

Pratush Mondal

UNLOCKING THE MIND: UNDERSTANDING THE DIFFERENCE BETWEEN AI AND HI

In the age of rapid technological advancement, the realms of artificial intelligence (AI) and human intelligence (HI) have become central topics of discussion. From the sci-fi fantasies of intelligent robots to the everyday applications of virtual assistants, understanding the distinction between AI and HI is crucial for navigating our increasingly digital world. Let's delve into the depths of these two forms of intelligence to unravel their differences, capabilities, and implications for society.

Defining AI and HI

Artificial Intelligence (AI) refers to the development of computer systems that can perform tasks typically requiring human intelligence. These tasks encompass a wide range of activities, from problem-solving and decision-making to language processing and pattern recognition. AI systems are designed to analyze vast amounts of data, learn from experience, and adapt to new information without explicit programming.

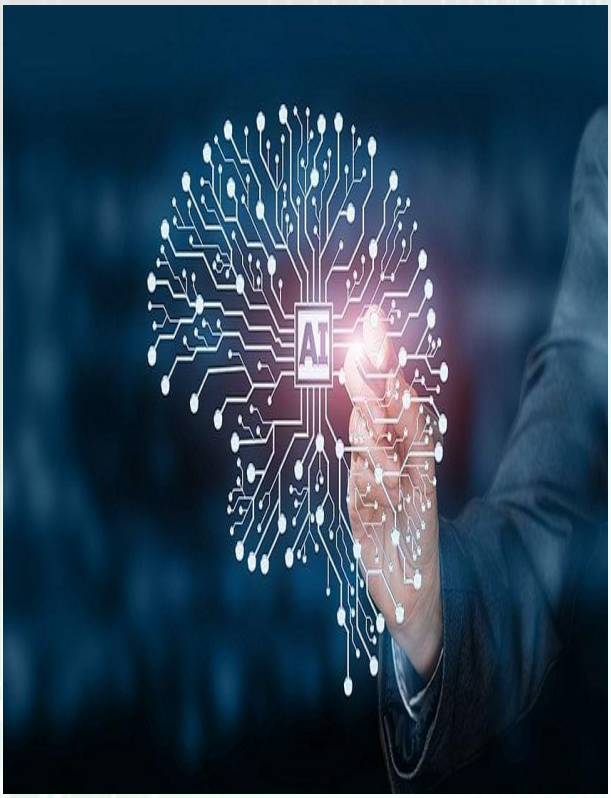
On the other hand, **Human Intelligence (HI)** encompasses the cognitive abilities and faculties possessed by humans, including reasoning, creativity, emotional understanding, and social interaction. Unlike AI, which relies on algorithms and computational processes, HI is deeply rooted in the complexities of human cognition, perception, and consciousness.

Capabilities of AI and HI

AI boasts impressive capabilities that continue to expand with advancements in machine learning, natural language processing, and robotics. AI systems can automate repetitive tasks, analyze complex datasets to identify patterns and trends, and even simulate human-like conversations through chatbots and virtual assistants. From recommendation algorithms powering streaming services to autonomous vehicles navigating city streets, AI permeates various aspects of modern life.

Conversely, **HI** offers unique strengths that set it apart from AI. Human intelligence is characterized by adaptability, creativity, emotional intelligence, and ethical decision-making. Humans possess the ability to think abstractly, generate novel ideas, and empathize with others—a level of cognitive complexity that remains challenging for AI to replicate fully.

Limitations of AI and HI



While **AI** has made significant strides in recent years, it still grapples with several limitations. AI systems often lack common sense reasoning and may struggle in situations requiring nuanced understanding of context or ambiguity. Moreover, AI algorithms are susceptible to biases present in training data, raising concerns about fairness and equity in decision-making processes. Ethical considerations surrounding privacy, accountability, and the societal impact of AI technologies continue to pose challenges for researchers and policymakers alike.

Similarly, **Human Intelligence** is not without its constraints. Cognitive biases, such as confirmation bias and availability heuristic, can influence human judgment and decision-making. Additionally, human cognitive capacity is limited by factors such as attention span, memory capacity, and processing speed. Despite these limitations, human intelligence remains unparalleled in domains requiring creativity, intuition, and moral reasoning.

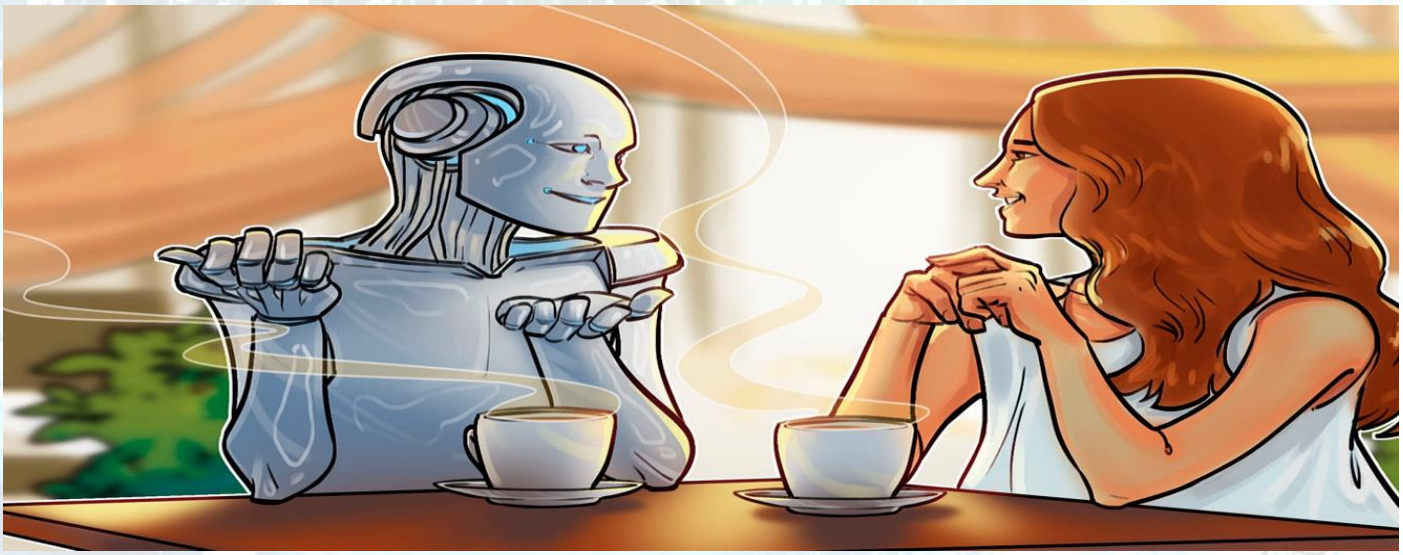
Impact on Society and Daily Life

The integration of AI and HI has profound implications for society, economy, and daily life. In healthcare, AI-powered diagnostics and personalized treatment plans improve patient outcomes and enhance the efficiency of medical services. In finance, AI-driven algorithms optimize investment strategies and detect fraudulent activities, contributing to financial stability and market transparency.

Education benefits from AI-enabled personalized learning experiences and adaptive tutoring systems, fostering student engagement and lifelong learning. In entertainment, AI recommendations and content creation tools enhance user experiences and drive innovation in storytelling and artistic expression.

However, the rise of AI also raises concerns about automation's potential impact on employment, privacy violations, and the exacerbation of societal inequalities. As AI technologies continue to evolve, it is imperative to strike a balance between technological innovation and ethical considerations, ensuring that AI serves humanity's best interests while upholding fundamental principles of fairness, transparency, and accountability.

Conclusion



In conclusion, the distinction between AI and HI lies at the intersection of technology and humanity, shaping the trajectory of our collective future. While AI offers unprecedented opportunities for innovation and efficiency, the unique capabilities of human intelligence—such as creativity, empathy, and ethical reasoning—remain irreplaceable. By harnessing the strengths of both AI and HI, we can navigate the complexities of the digital age while preserving the essence of what it means to be human.

Pratush Mondal
Department of English

NARRATING TALES OF OUR PAST WITH A.I

Aryan Kunti

NARRATING TALES OF OUR PAST WITH A.I

A.I.'s Potential

In the recent years A. I. has proven to be a valuable tool in various fields. It has made tasks easier for scholars and students alike. From writing essays to finding trivial answers, A. I. helps in all. But it has potential for much more than that.

A.I. in the field of History

The use of Artificial Intelligence has also been used in the studying of history. Historians have said that using modern science in the understanding of the distant past has it's ups and downs. It draws connections across a border swath or the historical record that would otherwise be impossible. It also helps in correcting distortions that come from analyzing one document at a time.

Understanding the writings of old

Be it deciphering of ancient texts or it's restoration, A. I. can make all of that happen. If proper use of it is known, it can help in various ways. The ability to decipher different kinds of texts has made the jobs of epigraphists a bit easier. Generally, for deciphering a script, the concept of Rosetta stone is applied, wherein a script is decoded on the basis of a familiar script present on the same object and identifying the patterns and predicting a possible sentence.

A.I., however can generate its own Rosetta stone. It can also be used to identify the evolutionary patterns in a said script. After understanding scripts.

A. I. can be further used for understanding different specific and their cultures.

Imagining Heroes and their abode

(A.I. generated image of Napoleon Bonaparte beside his painting)

Simulating images of historical figures and places is a favourite thing to do for the internet folks and history nerds alike. With available data, A. I. manages to create a near accurate version of figures and places to provide people a somewhat understanding of a time they never actually lived in.

Discovering places of value

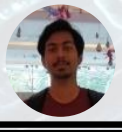
Archaeological sites are discovered through settlement patterns and clues in literature. A.I. could be used to identify those patterns and clues and guide excavators to their desired destination.

Providing for young minds

It is particularly useful to students who are working in the research field, it can help to find citations and references from books, while they focus on their main body of work. It can also help provide information about untold and hidden history, which would otherwise be impossible to find, especially for a young student. These are the many ways in which Artificial Intelligence might help a scholar or a student or a simple enthusiast of history.

Human efficiency in the world of A.I.

The task of A. I. isn't to replace human jobs, but to make our work easier. For the same reason we use calculator, an A. I. is used for the tedious and mind-numbing tasks, which humans generally want to avoid, giving them more time to focus on other works.



Aryan Kunti
Department of History

THE ADVENT OF ARTIFICIAL INTELLIGENCE OR AI

I sat down at my desk that evening,
Thinking exactly what uncle meant;
When he and his friend were speaking,
Earlier about AI's advent.

To a girl of ten his words were foreign,
Never heard or never seen;
But only perceived in fantasies' reign,
Or in a childhood dream.

"Machines will work like Human brain",
He told me so, with a huge smile on his face,
I stood perplexed, thinking he was insane;
Since how could machines beat the human race?

"Oh Lily, you are too young", he said, "to know-
The capacity of the computer memory,
That one day will snatch the show-
Of all creativity and fantasy story".

"Creativity?", I asked, "will it write poems like dad?
Or say stories like grandmother,
Both happy and sad?
Or will it sing like grandfather?"

"All", he said, "with the right data input,
It will learn, it will design and sing:
As any human ever could,
Or even proof better at everything"

"Will it cry or laugh or embrace?
Will it scold me or fight with me
On the same topic in different ways?
Or counsel and console when I'm not glee?"

"Perhaps not, it's a robot child,
Not an emotional fool", he replied.
"Then what good it is to mankind!",
With a bewildered expression I cried.

Irene Khan
Department of English

Exploring Human Intelligence and Artificial Intelligence

Rittom Mondal

EXPLORING HUMAN INTELLIGENCE AND ARTIFICIAL INTELLIGENCE

Artificial intelligence (AI) and human intelligence (HI) are two separate but related domains that influence modern technology and society. The way these intelligences are contrasted brings to light the special advantages and drawbacks of each, posing important queries about cooperation, morality, and the direction of intelligence. This essay explores the differences between artificial intelligence (AI) and

human intellect, highlighting both fields' advantages and disadvantages before arguing in favour of a mutually beneficial partnership.

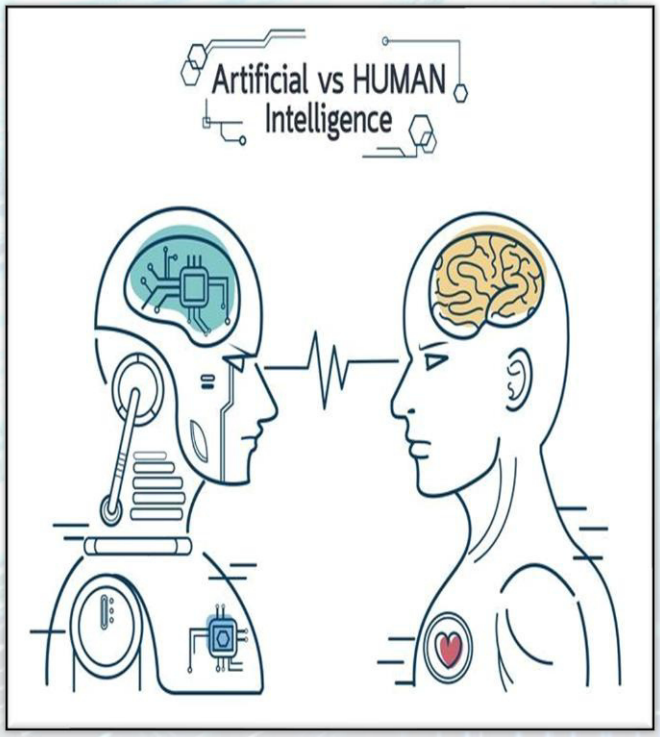
Human intelligence is a complex phenomenon that includes moral judgment, emotional depth, flexibility, and intuition. An essential component of human cognition, emotional intelligence enables people to manage difficult emotions, comprehend others, and form deep connections. This emotional complexity gives decision-making a more complex layer by affecting decisions based on empathy and understanding in addition to rationality.

Another characteristic of human intelligence is adaptability. People are remarkably good at learning from a variety of experiences, coming up with original ideas, and quickly adjusting to new circumstances. This flexibility has its roots in the intricacy of human awareness rather than being purely determined by predetermined algorithms.

One aspect of human intelligence that AI has yet to grasp is intuition, which is sometimes referred to as gut instinct or feeling. Humans are able to make decisions using a multitude of implicit knowledge and experiences that are outside the purview of formal analysis because of this intuitive understanding.

Moreover, moral judgment is an essential component of human intelligence. Humans can evaluate the effects of their acts using a framework of good and wrong since they are born with a moral sense. This ethical factor gives human decision-making an extra degree of accountability and encourages people to feel accountable for their decisions.

Conversely, the characteristics of artificial intelligence include speed of learning, consistency, memory capacity, and processing capability. AI's processing capacity allows it to quickly evaluate large volumes of data, spot patterns, anticipate outcomes, and carry out intricate calculations. This fast information processing speed is a clear benefit for tasks requiring large amounts of computer power. AI is known for its consistency because robots don't get tired or make mistakes while they perform repetitive jobs. AI systems eliminate the unpredictability associated with human performance by performing tasks with unwavering precision after they have been trained. Artificial intelligence (AI) systems possess unmatched memory capacity, enabling them to accurately recall large datasets. When performing jobs that rely for the retention and retrieval of vast volumes of knowledge, this recall power is especially helpful. AI's speed of learning is yet another important feature. Machine learning algorithms are



more adept at mastering tasks, picking up new abilities, and quickly adjusting to new information than traditional human learners.

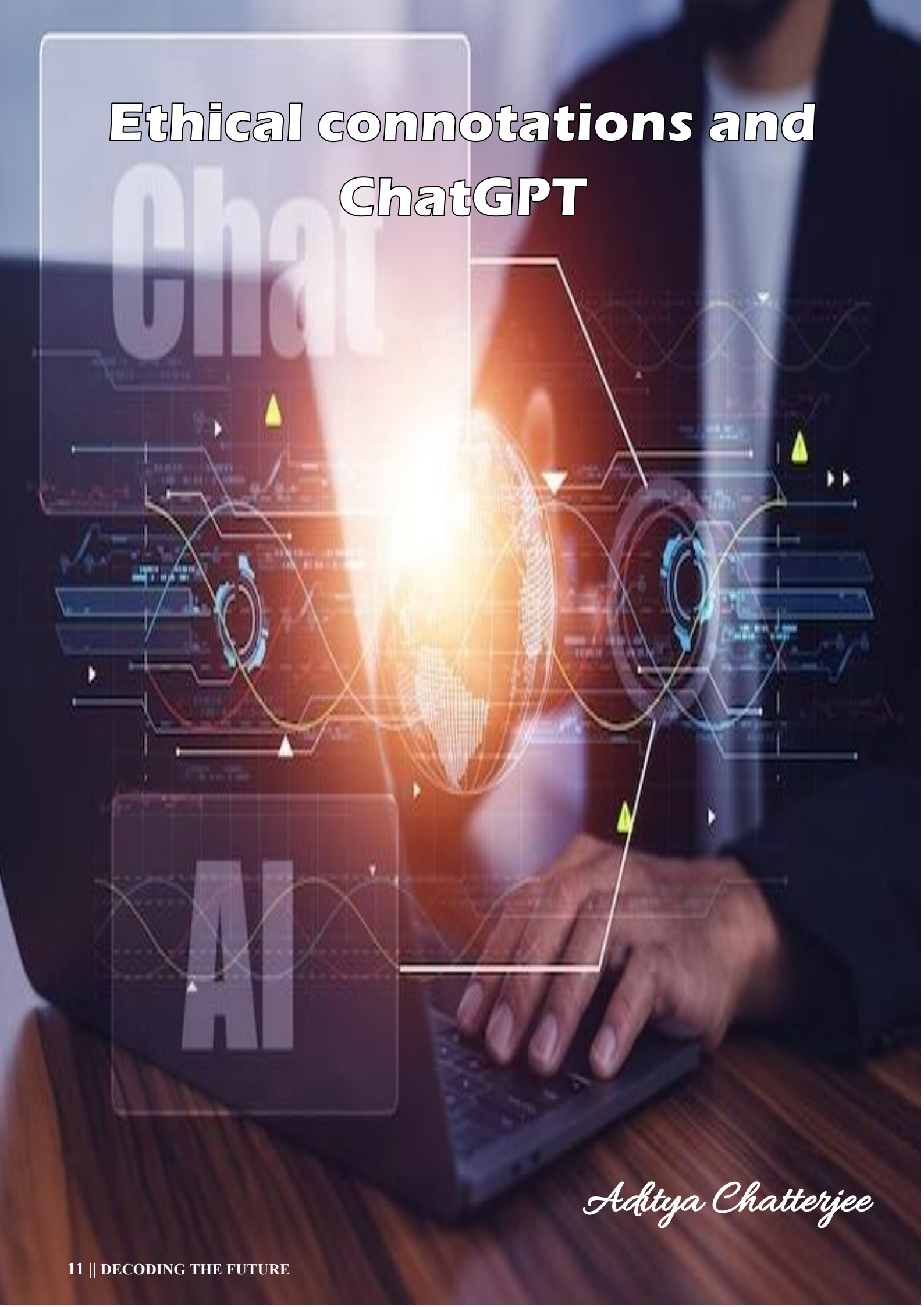
An ethical necessity arises as AI and human intelligence work together more and more. Transparency, fairness, and preventing harm are essential for the responsible development and application of AI. Strong ethical principles that uphold social norms and guarantee that the advantages of AI are shared fairly must underpin AI applications.

Furthermore, the possible societal effects of widespread AI adoption are also ethical problems. Regulation and careful thought must be given to issues like job displacement, privacy problems, and the moral application of AI in a variety of businesses. Technological breakthroughs alone won't be enough to responsibly integrate AI into society; we also need a thorough awareness of the ethical issues and a dedication to resolving them.

In conclusion, the interaction between artificial intelligence and human intelligence reveals a dynamic environment in which both have distinct advantages and disadvantages. Human intelligence is evidence of the complexity of consciousness because of its emotional richness, flexibility, intuitiveness, and moral discernment. Artificial intelligence, on the other hand, demonstrates how machines can be used to enhance human abilities due to its consistency, computing power, memory, and learning speed. The future is a cooperative and symbiotic connection, not the view of AI and human intelligence as rivals. The combination of these intelligences can result in previously unheard-of breakthroughs in industries like finance and healthcare. But this kind of cooperation necessitates giving ethical considerations, accountability, and avoiding biases in AI systems serious thought. The ethical imperative that drives AI's incorporation into society emphasizes the importance of responsible development, open methods, and a dedication to resolving societal issues. Realizing the full potential of both domains depends on striking a balance between human creativity and machine aid as humankind continues to navigate the rapidly changing terrain of intelligence. The combination of artificial intelligence and human intelligence can work in harmony to expand the realm of possibilities and usher in a new era of knowledge and creativity for civilization.

Rittom Mondal
Department of English

Ethical connotations and ChatGPT



Aditya Chatterjee

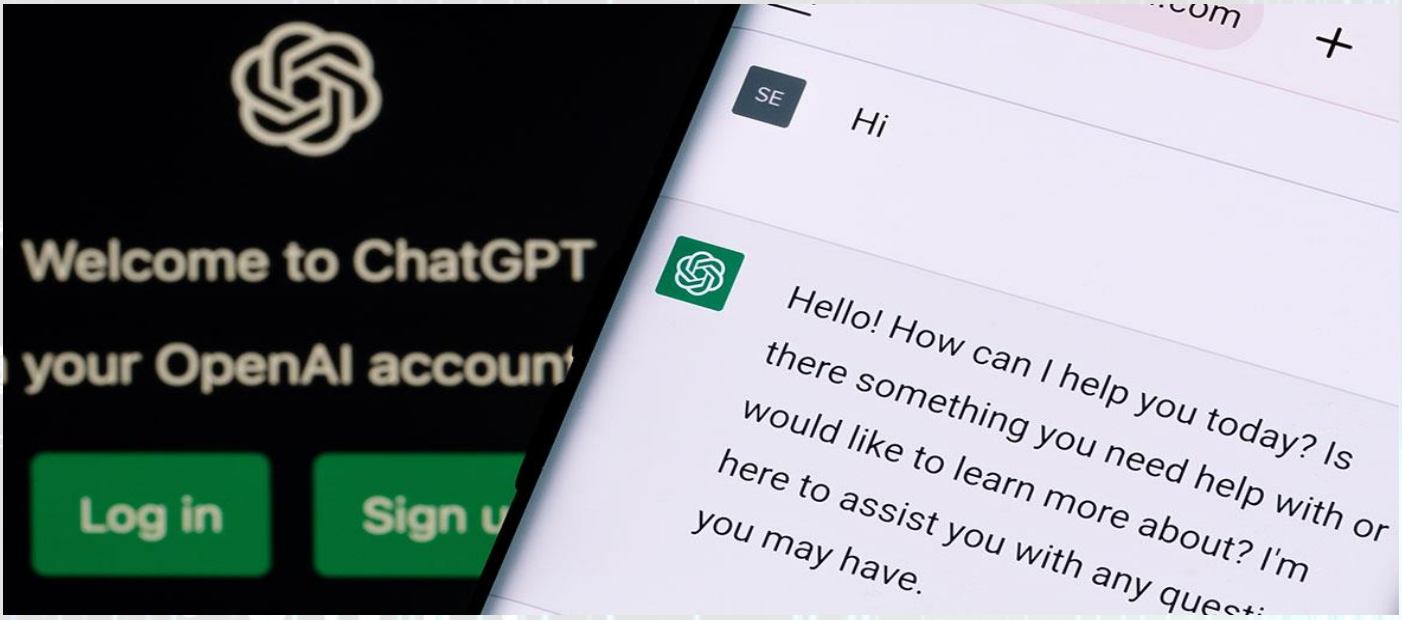
ETHICAL CONNOTATIONS AND CHATGPT

Ethics as we know is a physical discipline that's mostly concerned with examining or justifying prescribed rules and statements that has been compiled several thousand years ago. In the European context, the roots of philosophical ethics can be normatively traced back to Greek antiquity – having numerous ethical theories that form the cannon. Among them Aristotelian concept of **'virtue ethics'** sought to evaluate the ethical quality of an action or situation which refers to the character of the action. In more recent times, the work of Immanuel Kant who's seminal work on **'Categorical Imperative'** has solidified the base of modern ethics.

While it's important to realize there are extensive theoretical formul-ations related to ethics, it's worth noting that there are focus areas within ethics that sought to use specific aspects of this vast domain of vivid theory. **"Ethics of technology"** is seen typically as a branch of ethics that aims to understand ethical questions arising from specific fields. One field that has developed over the years is that **of 'computer ethics' / 'ethics of AI'**. An example of this could be provided through the acronym **FATE** (fairness, accountability, transparen-cy and ethics). This article is a brief exploration of the ethical implications arising out of ChatGPT – a large web-based language model that raises questions about fairness, authenticity and transparency.

Theoretically speaking, it's grounded on modern 'computer ethics' and explores ethics of emerging techn-ological products.

ChatGPT as we know is an interactive system that allows users to have conversations using natural linguistic medium. The dialogue format employed by ChatGPT allows it to answer follow-up questions, admit mistakes, challenge incorrect inputs and reject immoral requests. Technically it's based on OpenAI's generative pre-trained **"Trans-former Language (GPT) Model"** particularly GPT3 and GPT4. We refer to ChatGPT **as a 'technology'** in the sense defined by Britannica, the online dictionary **"The application of scientific knowledge to the practical aims of human life"**. **ChatGPT can interact across a broad range of topics**, provide answers of high caliber and with



good (debatable) accuracy and interaction with it proves to be cathartic in the sense that conversation with it feels entirely natural, almost like an educated human being. This index of naturalistic discourse can be aptly summed up using the last few lines of Milton's Samson Agonistes "Calm of mind, all passions spent".

The following characteristics of ChatGPT enables us to understand the degree of dominance it exerts over its rivals in the long run and acquire an edge as well as relevance in the contemporary cyber landscape –

1. Production of high-quality output in response to human input that's often quite difficult to distinguish as an output generated by AI.
2. Ability to engage in dialogical interactions on a very broad array of topics.
3. Ability to learn from interaction leading to its allowance for further improvement in regards to content quality and enhance acceptability.
4. Ability to tailor its output to specific language styles.

One consequence of these characteristics is that one cannot recognize the intervention of ChatGPT from original human interventions. The ability to interact with technology in such a simple way have revolutionized the way humans-computer interactions. This brings in the question of ethics both in good as well as in bad way. Frankly speaking, the ethical benefits offered by ChatGPT has never been thoroughly discussed in the discourses of teaching and learning as such it can revolutionize the way we are introduced to literature or any other subject in general. There is however a widespread perception in the media that it can be disruptive and transformative which in terms of technology discourses typically mean that it'll help usher economic benefits be it for start ups, optimization of existent industries or accrual of further growth in tech sector. Such economic development can be counted as **wellbeing** for many people and this highlight the moral benefit ChatGPT can offer.

The key to ethical analysis of ChatGPT lies in the fact that it can revolutionize the way internet search works. Google is currently the market leader in this segment. More recently, Microsoft has announced its upcoming interactive AI based program Bing that will run on ChatGPT and GPT 3.5 which they claim is faster than the existing programs. In more general terms, the implications of ChatGPT can be suggested to be providing additional intelligence for the sake of improvement in operational fields.

While the moral benefits are somewhat fuzzy, there are some existential questions surrounding ChatGPT. The primary question is the question of authorship. ChatGPT texts are incredibly difficult to differentiate from human authors which can lead of problems of attribution of authorship which in more general terms we call **plagiarism**. This is seen in case of student assessment where students take help from ChatGPT regarding some essays and imply that

they have jotted down those points. That explains why academicians are so skeptical regarding ChatGPT. It can lead to potential down gradation of cognitive skills of students and that's something to worry about.

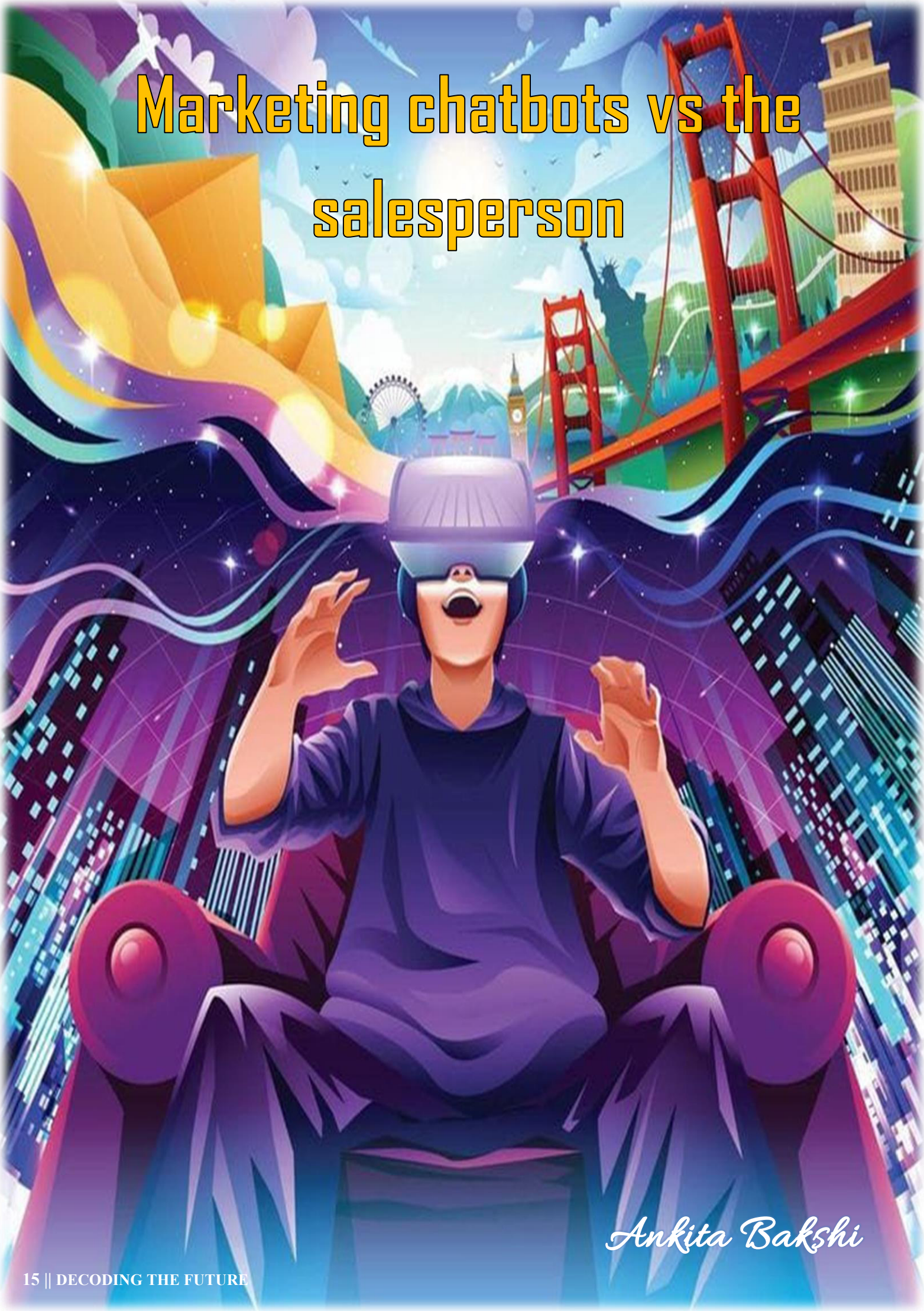
In addition to this, the question of employment is another serious ethically driven question that requires serious brainstorming in particular to jobs related to production output that have close affinity to digital systems. As technology progresses, human intellect will fall behind leading to widespread unemployment. The world is surely awaiting the rough beast slouching towards Bethlehem given the bleak situation ahead.

Another important moral question pertaining to OpenAI system is that of misinformation and **disinformation**. This question arises because of the inability to distinguish between the original and the manipulated and this issue becomes all the more menacing when this tool could be used to favor **unwarranted political intervention** and generate plausible scenarios for political lobbying that may overwhelm the existing **scrutinizing** mechanisms.

Thus, it can be concluded that ChatGPT although having enormous potential can be a cause of serious problem if not addressed judiciously. A fact that needs serious questioning is that of **inherent racial bias** this model exhibit when dealing with discourse of **culture studies**. Perhaps this is high time that we seriously consider the ethical connotations associated with ChatGPT and mould it suits our own needs. By clearly **highlighting** the usage of AI in any essay or article while writing, we can do away with these inherent problems and misconceptions surrounding the same. Also, proper citation of original author is a primal requirement to facilitate healthy academic discourse in the long run. Outputs generated by ChatGPT must be viewed under intense **scrutiny** and the generated ideas must not be evaluated based on the **face value** itself. Afterall we must control AI and let it not be controlled by us else it can lead to Skynet type problems as shown in the Terminator movie series. One must use OpenAI as a source of inspiration, not for advocating malicious intentions. Then only can we reap the benefits of **eco-technology** (in the sense of stability and balance) in the long run.

Aditya Chatterjee
Department of English

Marketing chatbots vs the salesperson

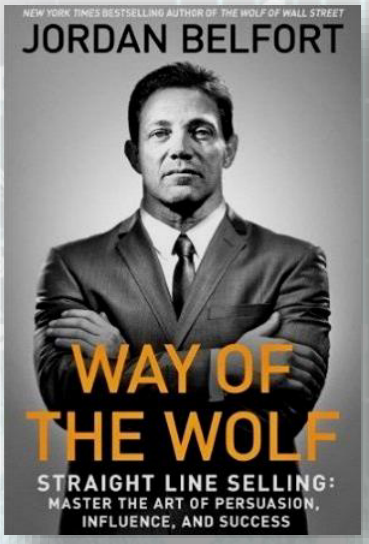


Ankita Bakshi

MARKETING CHATBOTS VS THE SALESPERSON

"Can you sell me this pen?"

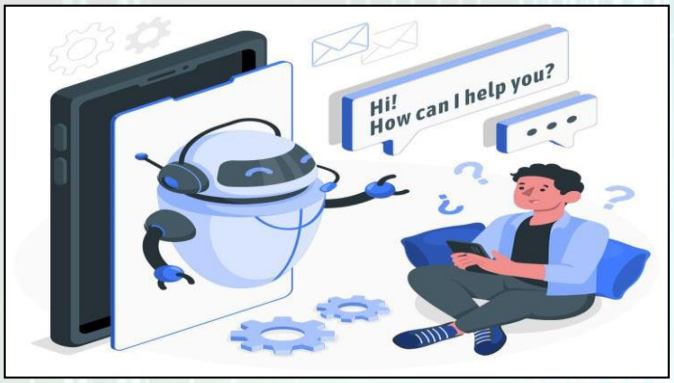
The former American stockbroker and author of the book **Wolf of Wall Street, Jordan Belfort** in the Oxford Union of 2018 replies about his own famous saying by stating, *"... the only rational thing you could do when someone says sell me this pen and that is to start asking them questions..." and further adds "...clients needs values."*



The job of a salesman is not to sell but to solve problems for the customers and generate value for the product and the services rendered. In 21st century through technological advancements mankind is finding faster, better and more diverse options to build a marketing network to reach their target audience.

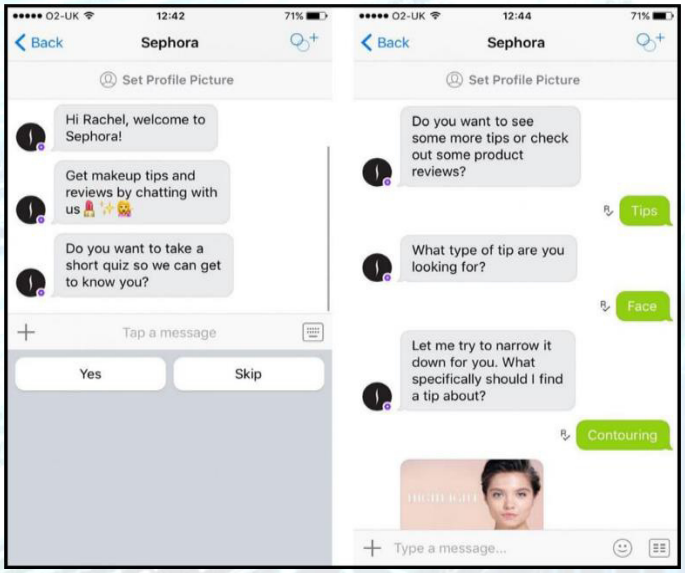
Now our shopping and buying experience is not just limited to salesmen but we are also interacting through online **MARKETING CHATBOTS** that play a vital role for brands to scale their businesses and sell more products.

A **chatbot** at the most basic level is a computer program that can simulate human-like conversation through the medium of digital devices like mobile, laptop or computer through websites or an app.



In this digital age Marketing Chatbots can hold interactive chats with customers and promote their brand with engaging dialogues that people can relate to. For example Sephora a French beauty brand has a chatbot that helps consumers make appointments with beauty specialists or purchase a product.

This image below shows how Sephora's chatbot on messaging app Kik works and how it tries to relate with the customer.



So it does seem that such Chatbots function similar to a salesman but never actually the same.

There are a lot of factors that differentiate a marketing chatbot's service from a professional salesman based on neuromarketing principles.

Active Listening

Perhaps the most important action when it comes to selling a product. There is a significant difference between collecting information provided by the customer that a chatbot performs and actually responding to their needs by taking into account their idiosyncratic requirements by the actively present salesperson.

Programmed Prompts Vs Human Understanding

Zig Ziglar has said, "Your attitude, not your aptitude, will determine your altitude." Marketing Chatbots are pre-programmed with various prompts that help it to navigate through the customers present preferences and put forward the most appropriate product. The information held by chatbots are significant.

But, a salesperson on the other hand is able to understand not just the current requirements but also is able to guide the customer through future needs and give advice through a positive reinforcing attitude

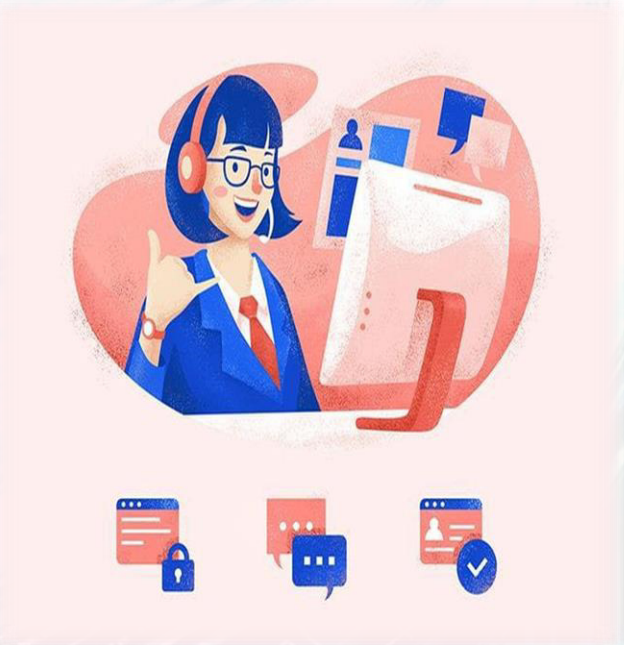
The salesperson speaks from prior knowledge on the other hand the chatbot has only prompts programmed into it.

Rapport Building

Marketing Chatbots have great efficiency and speed which makes it an extremely user friendly interface. But a salesperson connects on an emotional level although unaware of the individual's personal life can establish a common ground with a real time presence with an effective body language.

Framing

This method of marketing is to think from the point of view of the buyer and how the product will impact their lives. A chatbot is definitely equipped with enough data to inform the customer about the perks of possessing the product. But, a salesperson can effectively promote the benefits or any long term advantages that comes with the product and influence the buyer.



Availability

Of course the 24/7 availability of marketing Chatbots is a heaven for late night shoppers or for anytime of the day but when there is high online traffic the app or website can crash and remain shut for hours causing tremendous loss for the business.

Here it is necessary to have human back up and Chatbots should be ready for customer support during night time.

Thus, it is difficult to simply state which is better as both are necessary in this rapidly changing age.

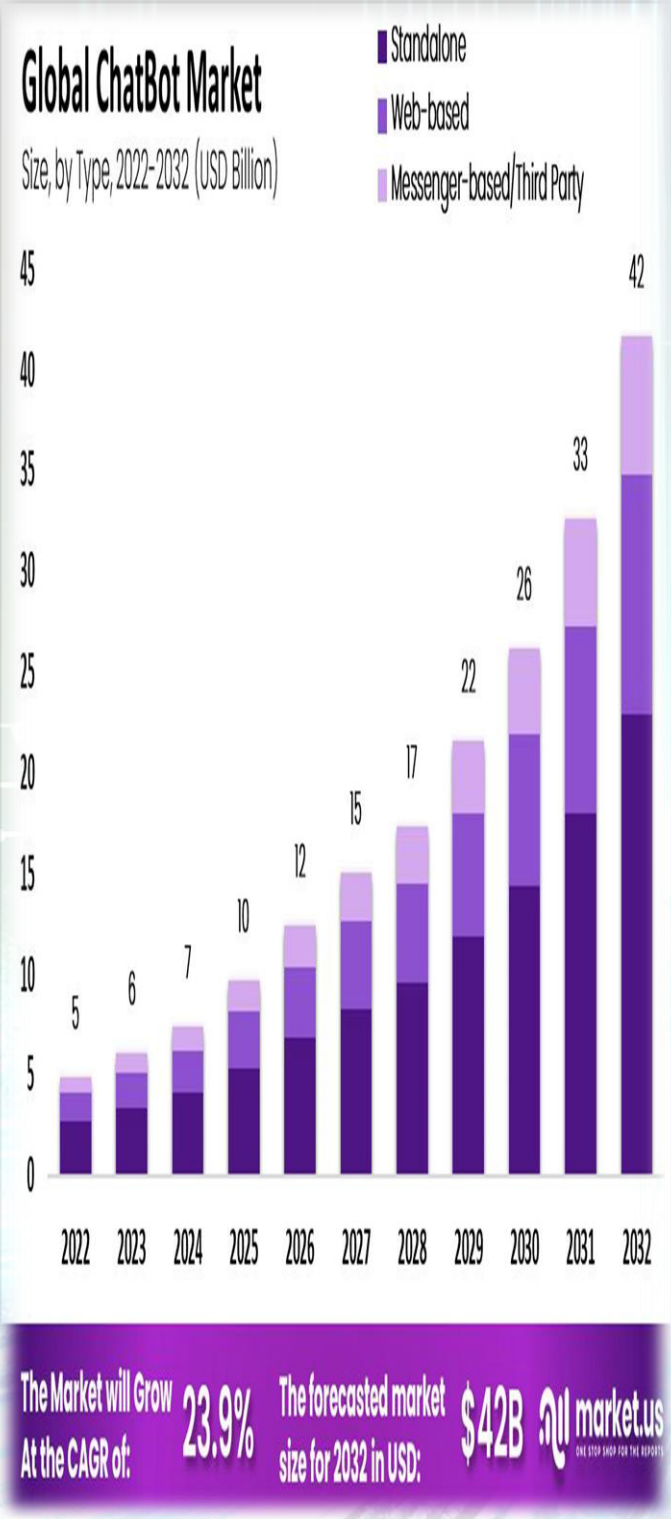
But humanity should brace themselves for further technological evolution in the marketing field. In **2022** the chatbot market size was **USD 4.7** billion, in **2024** it is **USD 7.01** billion and is expected to reach **USD 20.81** billion by **2029**.

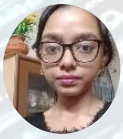
Similarly for the future the trend is speedily moving towards marketing sectors through - **VR** and **AR**.

Virtual reality is a completely immersive experience that replaces a real-life environment with a simulated one. Augmented reality augments the surroundings by adding digital elements to a live view. With VR customers can receive **immersive 3D** experiences that enable them to interact with products without any disturbance. With AR customers can overlay digital content onto the real world to provide the much needed **personal touch**. VR and AR make virtual tours of properties possible without having to go to different locations or allows customers to try on clothes virtually or try different hairstyles. **Lenskart** allows trying out different frames before picking the desired one.

Lakme India allows for Virtual Try-on feature on their website for their makeup products.

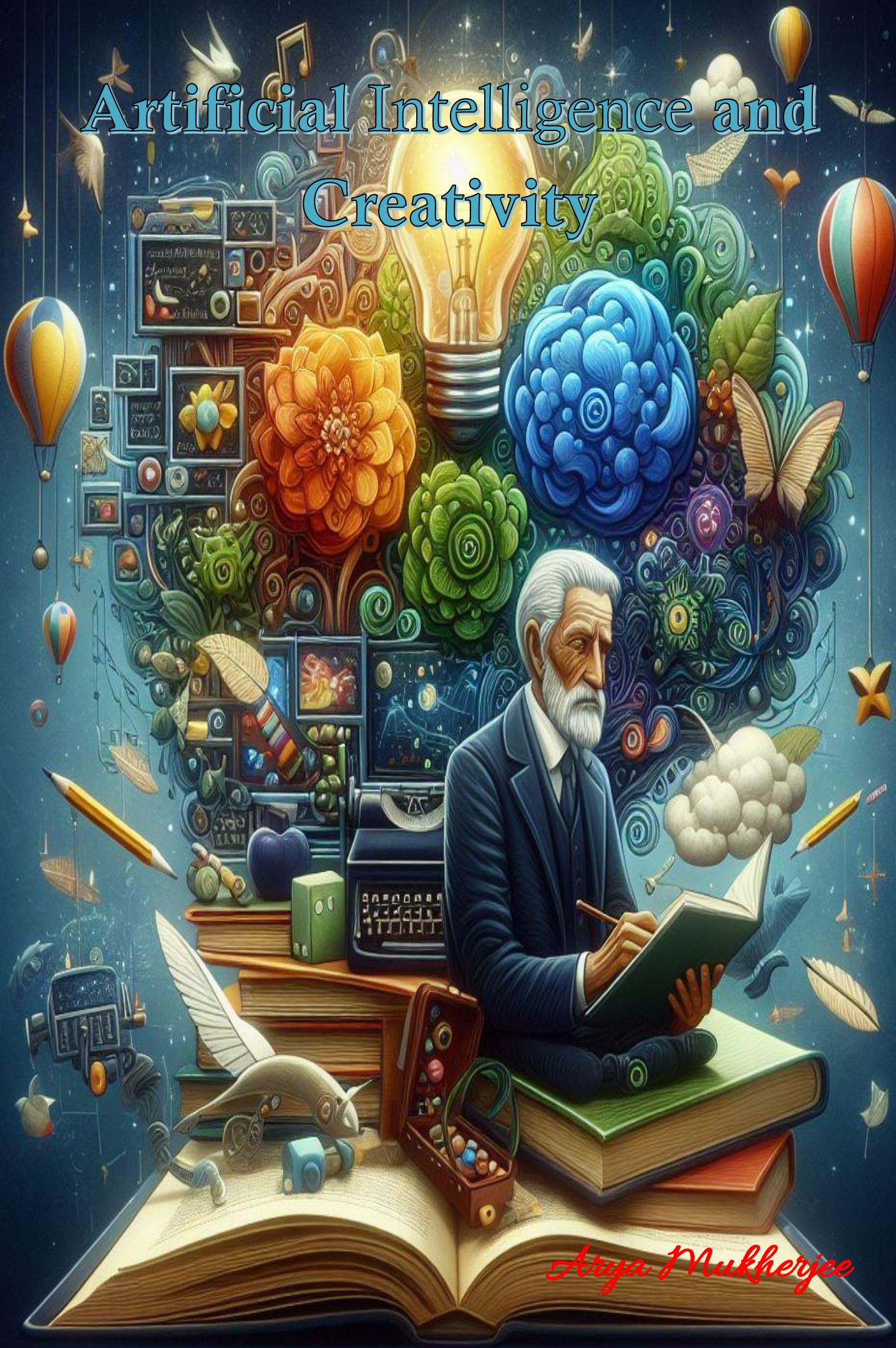
Hence, we have to know that **"CHANGE IS EVER CONSTANT"** and technological movement in the sphere of marketing and business has already taken this section by storm and we can expect further such changes.





Ankita Bakshi
Department of English

Artificial Intelligence and Creativity



Arya Mukherjee

ARTIFICIAL INTELLIGENCE AND CREATIVITY

AI has come into existence since the mid 20th century holding the hands of Alan Turner. Since then, it has rapidly improved and presently one can hardly name any sector of human activity that AI has no part to play in. From the Medical field to commercial and from educational to even sports-field. AI is intertwined now with everything humans do.

In other words, AI is used to make life easier for humans. That's good, right?

But AI hasn't only been restricted to making work easier for humans. Now it is also used to generate art, poetry. Right now, AI is just in a transitional period and has just crossed the threshold in creating various forms of art. The form of art it creates now is clearly inferior from arts humans can create. It repeats certain patterns that are mostly used and there are often mistakes made that don't look like mistakes a human might make, the mistakes are quite non-sensical without any implicit meaning hidden behind that 'non-sense'. However, given how AI has only evolved forwards since its creation, it's not to be stated that this can't change.

The question is, is there really any need for AI to be used to create art or write poetry?

Wordsworth says about poetry that it is the "spontaneous overflow of powerful feelings and emotions". In AI there is no feeling or no emotion. It just generates an assortment of words collected from the huge database it has access to. To write poetry or create art is for the artist to let out the feelings and emotions pent up inside him. Every art created by a human has a story behind it. It is a testament to what the artist had in his heart and mind at the time he created his art. So, while the 'art' or 'poetry' generated by AI, if we may call them that, might be visually pleasing, without its foundation being the heartfelt feelings and emotions of a sentient being, do they really have the right to be treated as 'Art' or 'Poetry' and receive the same kind of significance?

Arya Mukherjee
Department of English

कृत्रिम यात्रा बुकिंग एजेंट

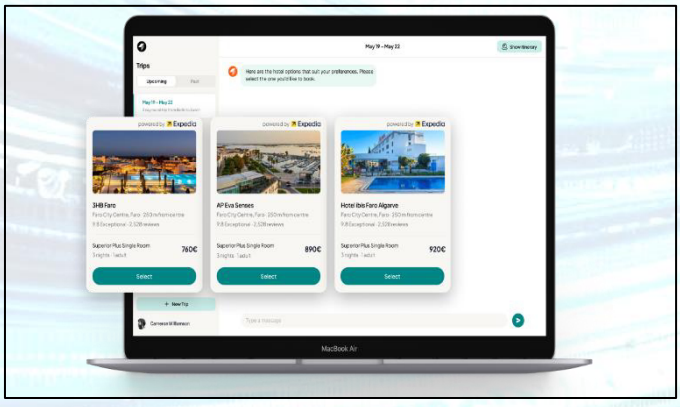
Ayushi Tiwari

कृत्रिम यात्रा बुकिंग एजेंट

पिछले कुछ दशकों में कृत्रिम बुद्धिमत्ता की कई परिभाषाएं सामने आई है|जॉन मैक्कार्थी ने 2004 में निम्नलिखित परिभाषा प्रस्तुत की है, यह विशेष रूप से बौद्धिक क्षमता से परिपूर्ण कंप्यूटर प्रोग्राम है | यह मानव बुद्धि को समझने के लिए कंप्यूटर का उपयोग करने के समान कार्य से संबंधित है,लेकिन ए. आई को खुद को उन तरीकों तक सीमित नहीं रखना है जो प्रत्यक्ष रूप से अवलोकन योग्य हैं I अपने सरलतम रूप में कृत्रिम बुद्धिमता एक ऐसा क्षेत्र है, जो समस्या समाधान को सक्षम करने के लिए कंप्यूटर विज्ञान और जटिल डेटा सेट को जोड़ता हैं I इसमें मशीन लर्निंग ओर डीप लर्निंग के उप क्षेत्र भी शामिल है ,जिनका अक्सर कृत्रिम बुद्धिमता के साथ संयोजन में उल्लेख किया जाता हैI इन विषयों मे ए. आई अल्गोरिथम है जो विशेष सिस्टम बनाने का प्रयास करते हैं जो इनपुट डेटा के आधार पर भविष्यवाणियां या वर्गीकरण करते हैं! इस तकनीक के अनुप्रयोग हर दिन

बढ़ रहे हैं और हम अभी बस संभावनाएँ तलाशना शुरू कर रहे हैं |कृत्रिम बुद्धिमता का उपयोग यात्रा बुकिंग में भी किया जा रहा है|कृत्रिम बुद्धिमता से बुकिंग का कार्य सरल हो जाता है! चिकित्सा से लेकर वित्तीय सहायता ओर परिवहन से लेकर कृषि तक, ए.आई एक प्रमुख भूमिका निभा रहा है !यात्रा उद्योग भी इसके दूरगामी प्रभाव से अछूता नहीं है! एन. आर. जी के अनुसार ,पत्रकार ऑनलाइन यात्रा गाइड लिखने के लिए ए. आई का उपयोग कर रहे हैं! सैद्धांतिक रूप ए.आई संचालित यात्रा उपकरण उपभोक्ताओं के लिए काफी मददगार हो सकते हैं ,जो छुट्टियों की योजना बनाने में होने वाली परेशानी को दूर करने में मदद करते हैं ,साथ ही व्यक्तिगत सलाह की पेशकश करते हैं , जो पहले केवल उन लोगों के लिए उपलब्ध थीं जो ट्रैवल एजेंट की सेवाओं का खर्चा उठा सकते थे,लेकिन जब उड़ान और आवास की बुकिंग, यात्रा कार्यक्रम या बजट की योजना बनाने जैसा जटिल कार्य की बात आती है तो क्या यात्री वास्तव में ए.आई पर अपना विश्वास रखने के लिए क्या कर सकता है, कि वे

आज जो उपकरण बना रहे हैं वे नवीनता से कहीं अधिक है ,और इसके अलावा उनके उपयोगकर्ता के यात्रा अनुभवों पर वास्तविक प्रभाव डालते हैं ?उपभोक्ता निश्चित रूप से उन गतिविधियों में मदद के लिए ए.आई का उपयोग करने के लिए तैयार है जिन्हें वे यात्रा अनुभव के एक मजेदार



हिस्से के रूप में देखते हैं| उदाहरण के लिए 40% का कहना है कि वे ए.आई से दर्शनीय आकर्षण के लिये जानकारी प्राप्त करने में रुचि लेंगे जबकि 36% स्थानीय भोजन विकल्पों के बारे में जानने के लिए ए.आइ का उपयोग करने पर विचार करेंगे, लेकिन इस प्रकार के उपयोग के मामले में,यह महत्वपूर्ण है कि उपभोक्ताओं को ऐसा महसूस हो जैसे कि वे अभी भी कृत्रिम चालक सीट पर है! वस्तुत आज के संदर्भ में यदि देखें तो हम पाएंगे कि कृत्रिम बौद्धिकता अपने पांव पूरी तरह पसार रहा है और वह दिन दूर नहीं जब हम इस कृत्रिम बुद्धिमत्ता रूपी सुरसा के मुँह में पूरी तरह समा जाएंगे |इसी स्थिति का भान करते हुए कवि मैथलीशरणगुप्त ने लिखा है "हम कौन थे, क्या हो गए हैं और क्या होंगे अभी, आओ बिचारे आज मिल कर, यह समस्याएं सभी|

Ayushi Tiwari
Department of English

THE INNOVATION RACE

HUMAN IMAGINATION VS AI CREATION

Human Imagination is one's own
Created Ocean to explore,
AI Creation is someone else's Aquarium
Build to explore.

Human Imagination is a
Fabricated castle of inexperienced experiences and unfelt emotions,
Whereas AI Creation is all mechanical and no emotions or experiences are involved.

Human Imagination do not always walks along side with
The pros and cons of every picture,
But, AI Creation always put up with
The pros and console every other pictures.

So, Human Imagination might be inferior sometimes and
AI Creation might be superior sometimes.

YET I BELIEVE,
It's better to be Inferior sometimes and learn from it,
Than be Superior all the time and never learn anything from it.

Jennifer Alam
Department of Education

ARTIFICIAL INTELLIGENCE'S SIGNIFICANCE FOR HEALTHCARE MANAGEMENT

Krittika Nath

ARTIFICIAL INTELLIGENCE'S SIGNIFICANCE FOR HEALTHCARE MANAGEMENT

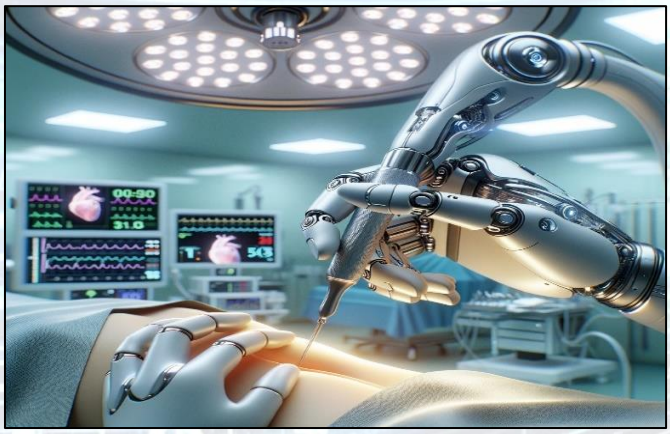
Artificial intelligence (Al) has been a game-changer in several industries recently, and the healthcare sector is no different. The delivery of medical services could be completely transformed by integrating Al into healthcare administration, leading to improvements in patient outcomes, accuracy, and efficiency.

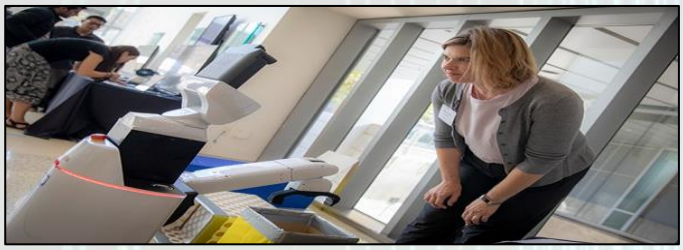
The improvement of diagnostic capacities is one of the main effects of Al on healthcare management. Large volumes of medical data, such as patient records, imaging results, and genetic data, can be analyzed by machine learning algorithms to find patterns and trends that human practitioners would miss. This makes it possible to diagnose patients more quickly and accurately, which facilitates prompt interventions and better treatment results.

Al is essential to customized medicine as well, helping to customize treatment regimens for each patient. according to their particular genetic profile and medical background. Healthcare providers should take a proactive rather than reactive approach to patient care by utilizing Al algorithms that use predictive analytics to forecast possible health problems and suggest preventive treatments.

Artificial intelligence (AI) solutions greatly improve operational efficiency in healthcare administration, Healthcare workers can save critical time by automating administrative chores like billing, arranging. appointments, and maintaining records. This allows them to concentrate on providing patient care.

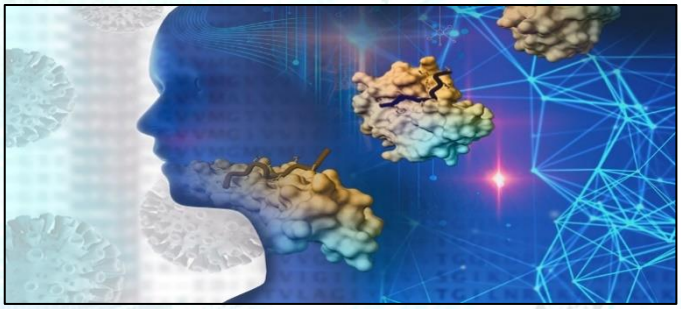
Process simplification lowers administrative expenses and the probability of errors, which eventually results in more affordable healthcare delivery.





In addition, Al-powered instruments are shown to be quite useful in the continuous fight against infectious diseases. Al systems can examine large datasets to follow the transmission of illnesses, identify possible hotspots, and suggest focused actions during outbreaks. By enabling healthcare authorities to make well-informed decisions quickly, this real-time analysis helps to stop the rapid escalation of disease transmission.

The extensive use of Al in healthcare management presents ethical and privacy issues despite its many advantages. Robust security measures are necessary when using sensitive patient data for Al analysis to prevent misuse and unauthorized access. One of the most important challenges facing healthcare practitioners is finding a balance between protecting patient privacy and utilizing Al to advance medicine.



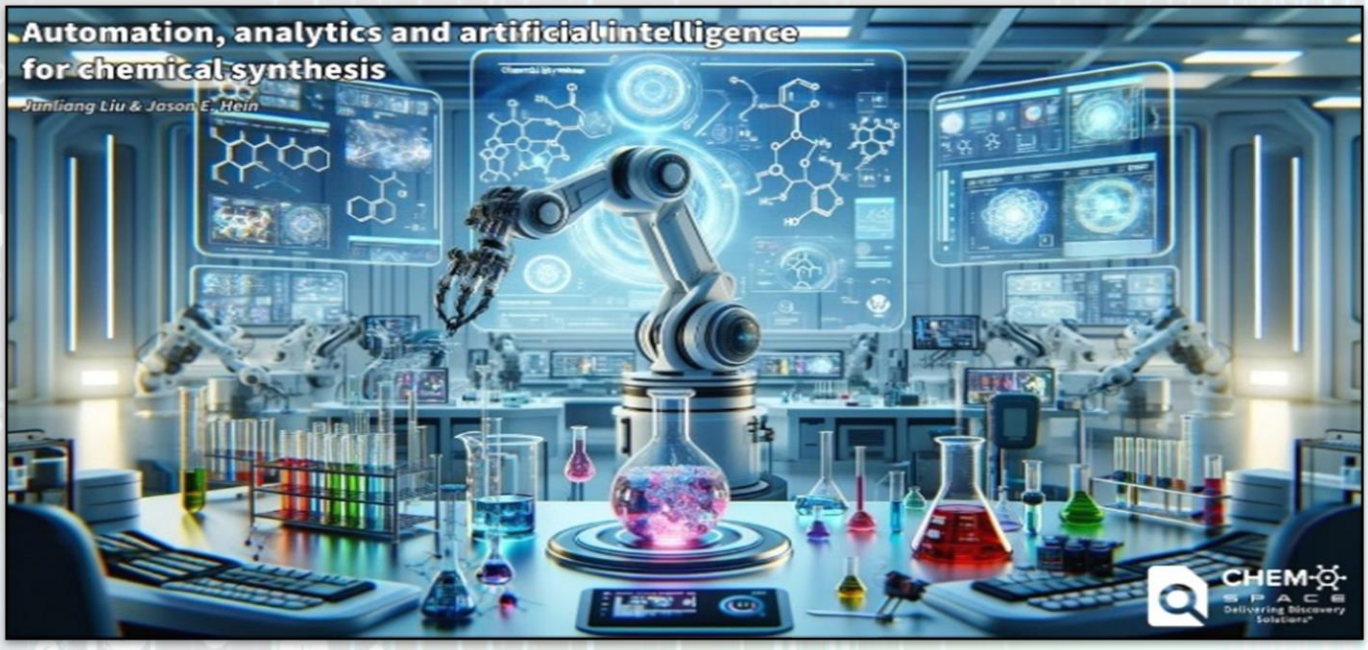
To sum up, artificial intelligence has enormous and revolutionary consequences for healthcare administration. Al is changing the way that healthcare is delivered, from disease outbreak management and operational efficiency to diagnostic accuracy and individualized therapy. To guarantee that these developments are used properly and eventually lead to a better and more effective healthcare system, it is crucial to carefully analyze ethical and privacy concerns.

Krittika Nath
Department of English

Artificial Intelligence: The Future of Chemistry

Pritom Manna

ARTIFICIAL INTELLIGENCE: THE FUTURE OF CHEMISTRY



Introduction:

Artificial intelligence (AI), a field within computer science, focuses on developing methods that empower computers to perform tasks typically associated with human intelligence, such as thinking and learning. AI is having a revolutionary impact on various facets of our lives and spanning across numerous industry sectors, with the pharmaceutical sector experiencing no exception to this transformation . Also, in the medical field, deep learning techniques classify lung cancer with high accuracy, and AI addresses challenges in processing continuous streams of big data from medical IoT devices. The emergence of AI has ushered in a new era in drug discovery research, delivering a paradigm shift from traditional trial-and-error-based or hypothesis-driven methods toward more rational and data-driven approaches.

John McCarthy is considered as the father of Artificial Intelligence. John McCarthy was an American computer scientist. The term "artificial intelligence" was coined by him. He is one of the founder of artificial intelligence.

Machine learning (ML), a subset of AI that enables computers to learn from training data, has been highly effective at predicting various types of cancer, including breast, brain, lung, liver, and prostate cancer. In fact, AI and ML have demonstrated greater accuracy in predicting cancer than clinicians.

AI is being used in a wide variety of industries today, including: Healthcare: It is being used to develop new drugs and treatments, diagnose diseases, and provide personalized care. Finance: It is being used to detect fraud, manage risk, and provide investment advice.

Professor H.N. Mahabala in the 1960s. Knowledge-Based Computing Systems (KBCS) created in 1986 by UNDP also paved way for India to focus on AI.

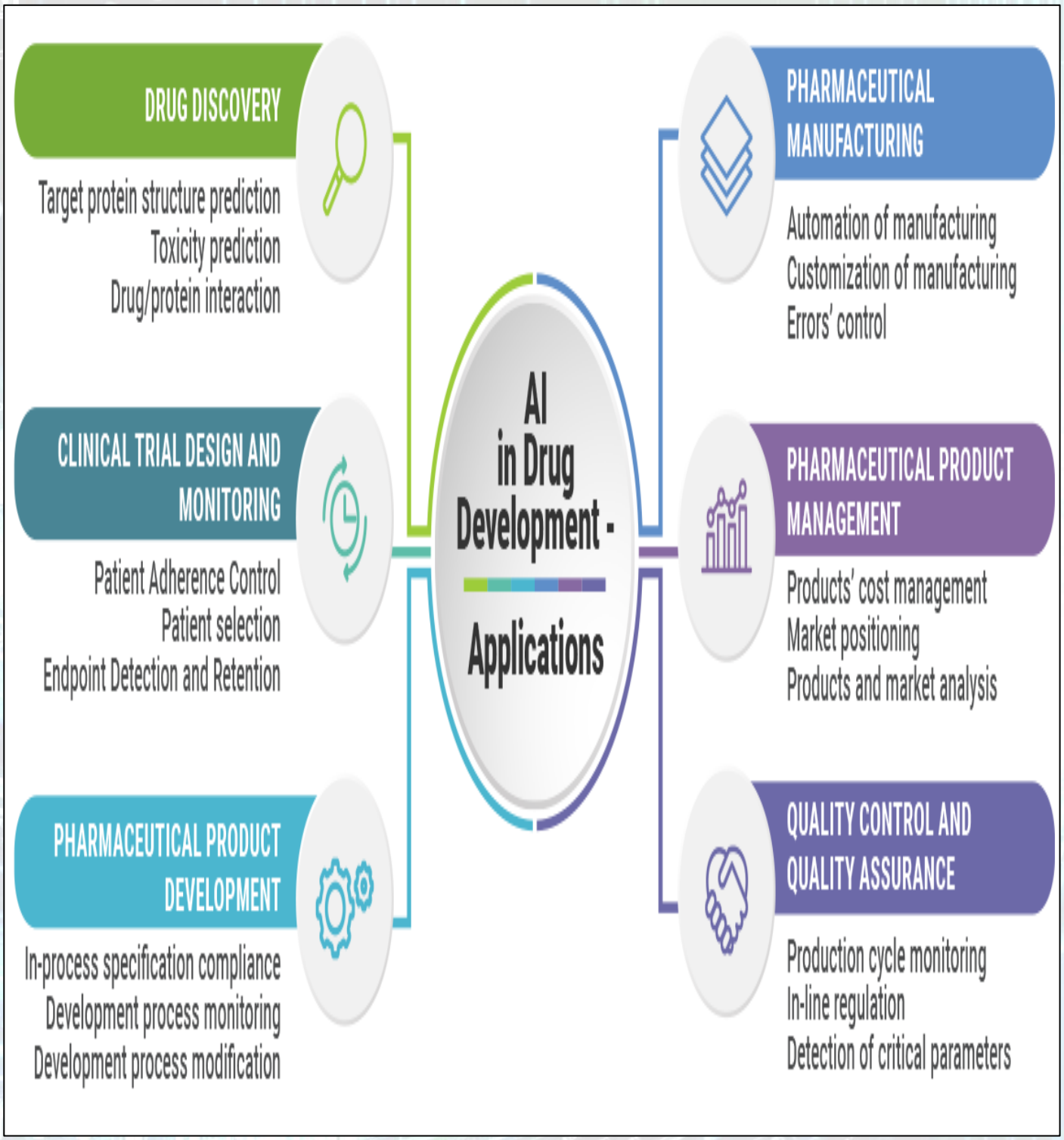
Silicon Valley's Reign Continues. The United States remains a powerhouse in AI research and technology.

By using AI algorithms to analyze data from large populations, they can be used to identify trends and patterns that can help predict the effectiveness of potential drug candidates for specific patient populations, which can help tailor treatments to the needs of individual patients.

The incorporation of AI technologies provides pharmacists with tools and systems that help them make accurate and evidence-based clinical decisions. By using AI algorithms and ML, pharmacists can quickly analyze large amounts of patient data, including medical records, lab results and medication profiles.

The use of artificial intelligence (AI) in medicinal chemistry has gained significant attention in recent years as a potential means of revolutionizing the pharmaceutical industry . Drug discovery, the process of identifying and developing new medications, is a

complex and time-consuming endeavor that traditionally relies on labor-intensive techniques, such as trial-and-error experimentation and high-throughput screening. However, AI techniques such as machine learning (ML) and natural language processing offer the potential to accelerate and improve this process by enabling more efficient and accurate analysis of large amounts of data .



Advantages of AI:

- ✓ Accelerating Drug Discovery.
- ✓ Virtual Screening.
- ✓ Predicting Drug-Drug Interactions.
- ✓ Materials Discovery and Development.
- ✓ Generative Models.
- ✓ Predicting Material Properties.
- ✓ Green Chemistry and Sustainability.
- ✓ Reaction Prediction.

Disadvantages of AI:

- ➲ **Job Displacement:** AI automation may lead to job losses in certain industries, affecting the job market and workforce.
- ➲ **Ethical Concerns:** AI raises ethical issues, including data privacy, algorithm bias, and potential misuse of AI technologies.
- ➲ **Lack of Creativity and Empathy:** AI lacks human qualities like creativity and empathy, limiting its ability to understand emotions or produce original ideas.
- ➲ **Cost and Complexity:** Developing and implementing AI systems can be expensive, require specialized knowledge and resources.

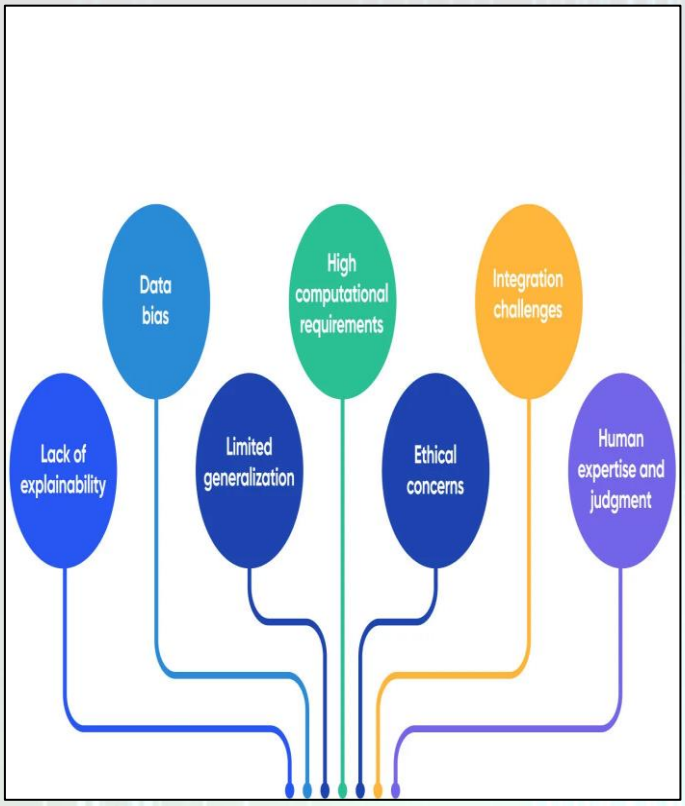
Future prospect of AI in chemistry:

AI and ML technologies in the chemical industry are only at the beginning of their development, having a prosperous future in front of them.

Precision Medicine: Precision medicine's main goal is to adjust medical treatments to patients based on their unique needs and characteristics. AI will analyze patient data, people's medical records, and their lifestyles to identify patterns and precinct risks of certain diseases and treatment outcomes.

Green Chemistry: There's a trend towards more sustainable and green chemical practices right now, and AI can help achieve this faster.

Materials Design and Discovery: AI can help scientists design and discover new materials with desired properties. With the use of AI and ML, chemists will be able to predict new materials with characteristics like conductivity, strength, and catalytic activity.



Conclusion:

Utilizing AI in the chemical industry, especially in laboratories and CROs, is one of the main ways to revolutionize and streamline processes. It helps these organizations analyze data, make predictions, and come up with new solutions that have not been available without AI.

Even though the application of artificial intelligence is still to reach its full potential in chemistry, it is highly likely that it will transform the industry in the coming years. Thus, it's time to join this trend and use AI to our best benefit.

Pritom Manna
Department of Chemistry

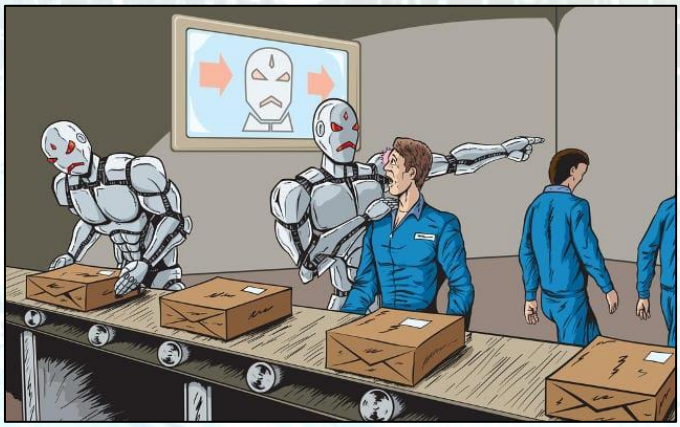
Job Displacement Due to Artificial Intelligence

Rishita Baidya

JOB DISPLACEMENT DUE TO ARTIFICIAL INTELLIGENCE

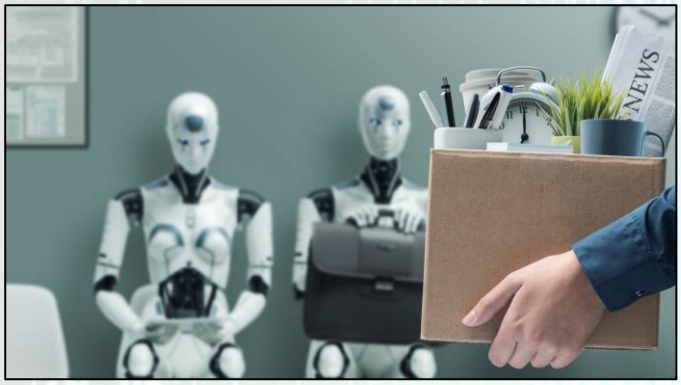
Job displacement and opportunities in the AI era represent a complex and transformative landscape that has significant implications for the global workforce. As artificial intelligence continues to advance, it has the potential to automate routine tasks, leading to the displacement of certain jobs. However, this technological revolution also opens up new avenues for employment and innovation.

The rise of AI has already started to reshape various industries, with automation taking over repetitive and predictable tasks. Jobs in manufacturing, customer service, and data entry, for instance, face the risk of displacement as AI systems become more sophisticated. This phenomenon raises concerns about unemployment and the need for reskilling the workforce to adapt to the changing job market.



Despite the challenges posed by job displacement, the AI era also brings about numerous opportunities. One of the key areas is the creation of new roles centered around the development, implementation, and maintenance of AI systems. Demand for AI specialists, data scientists, and machine learning engineers is on the rise as organizations seek skilled professionals to harness the potential of AI technologies.

Furthermore, the AI era fosters innovation and the emergence of entirely new industries. Startups and established companies alike are exploring AI applications in fields such as healthcare, finance, and education, leading to the creation of jobs that were previously nonexistent. The dynamic nature of the technology sector means that individuals with adaptability and a willingness to learn can capitalize on these emerging opportunities.



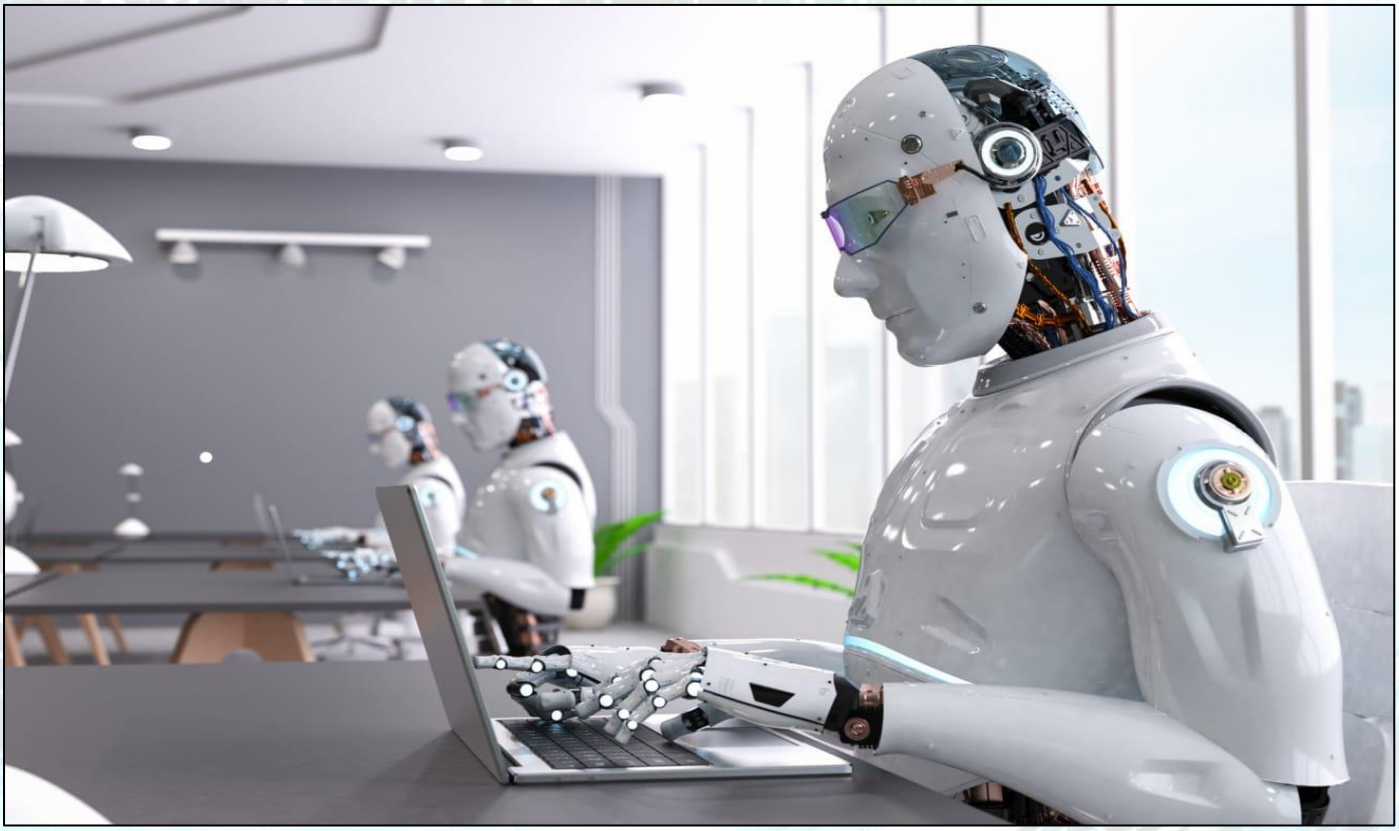
In addition to technical roles, there is a growing need for professionals with expertise in ethics, policy-making, and regulation surrounding AI. As AI systems become integral to decision-making processes, there is a demand for individuals who can navigate the ethical considerations and ensure responsible and fair use of these technologies. Policymakers play a crucial role in establishing regulations that balance innovation with societal well-being.

Education and training programs play a pivotal role in preparing the workforce for the AI era. Reskilling initiatives are essential to help individuals transition from jobs at risk of automation to roles that leverage their unique human skills alongside AI technologies. Lifelong learning becomes a cornerstone in this era, enabling individuals to stay relevant and competitive in a rapidly evolving job market.

Governments, businesses, and educational institutions must collaborate to create comprehensive strategies that address both job displacement and the opportunities presented by the AI era. Investment in education, vocational training, and upskilling programs can mitigate the negative impact of job displacement, ensuring that the workforce remains adaptable and resilient.

While AI may displace certain jobs, it has the potential to enhance productivity, drive economic growth, and address complex challenges. The key lies in fostering a balance between technological advancement and the well-being of the workforce. Embracing the opportunities presented by the AI era requires a strategic and collaborative approach to ensure that the benefits are distributed equitably across society.

In conclusion, the AI era brings about a dual challenge of job displacement and opportunities. While automation may reshape traditional roles, it also opens up new possibilities for innovation and employment. A proactive and inclusive approach to education, training, and policy-making is crucial to navigate the evolving landscape and ensure a positive outcome for individuals and society as a whole.



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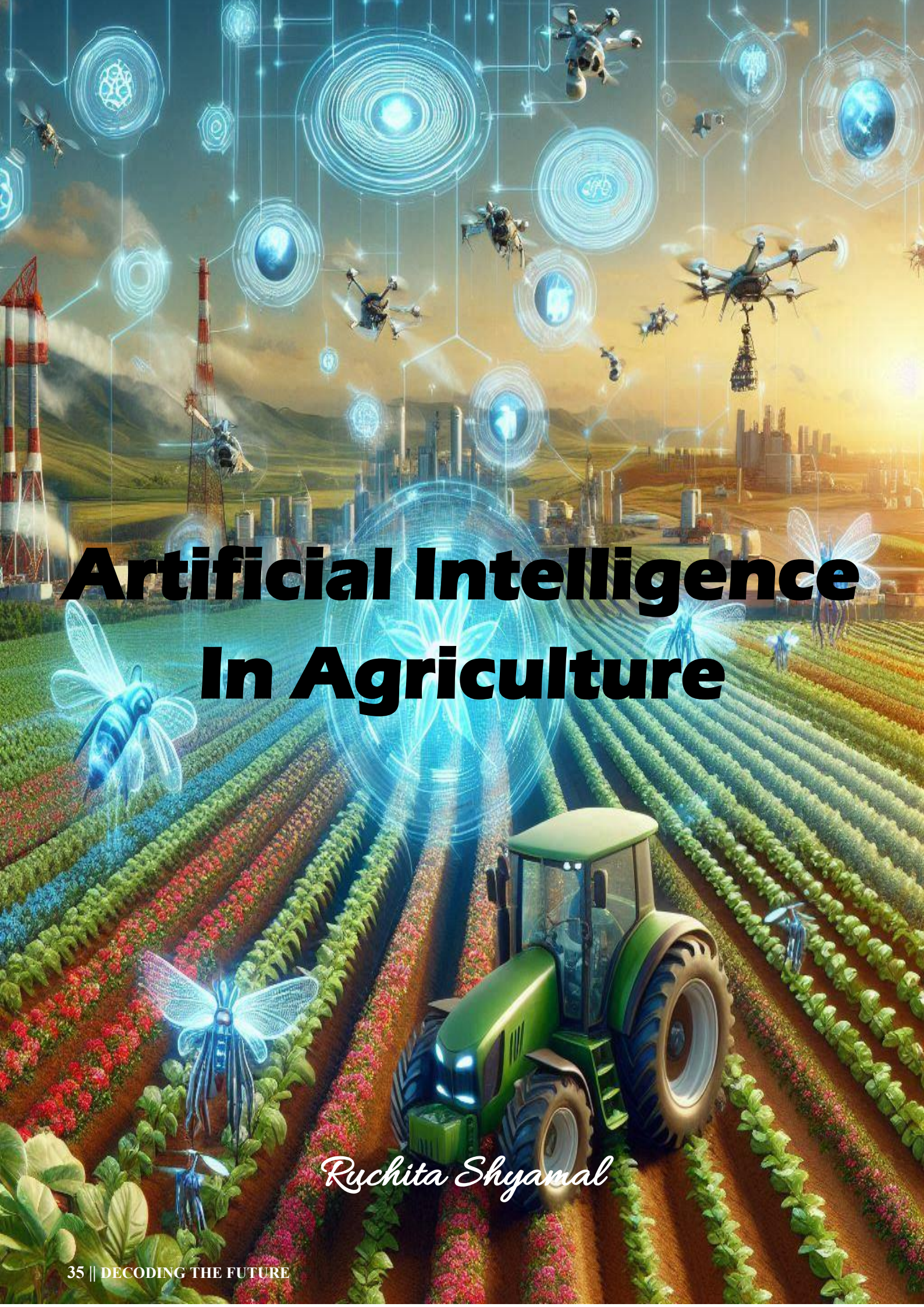


Artificial Intelligence In Agriculture

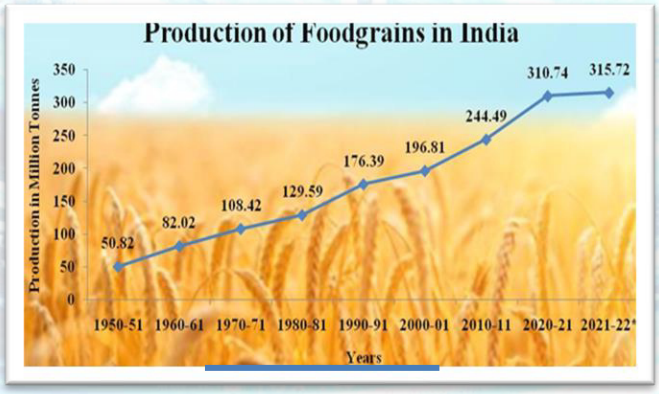
Ruchita Shyamal

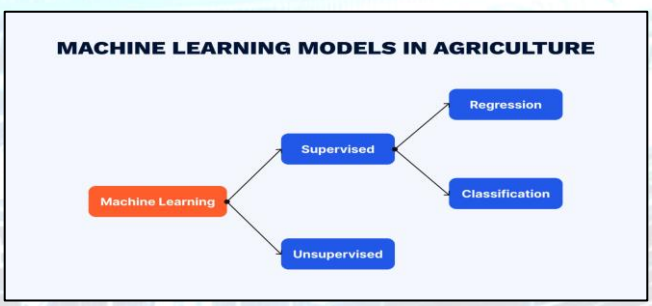
ARTIFICIAL INTELLIGENCE IN AGRICULTURE

Abstract

India is currently the world's second largest producer of starting from several dry fruits to farmed fish, vegetables and even agriculture-based textile raw materials. In the past 14 years Indian Agriculture production has increased from 84 USD to 397 USD which is an 11% annual growth rate. According to 2023-2024 analysis the sector is estimated to grow at 3% as compared to 4% in 2021_22. India has the most arable land in the world followed by the United States, Russia, China and Brazil where almost 60% of the total land area is dedicated to farming. At the time of India attained independence the state of agriculture sector was very poor The Twenty first century has seen a significant acceleration in growth through adopting Green Revolution Technology Plays an important role in the socio-economic development and progress.

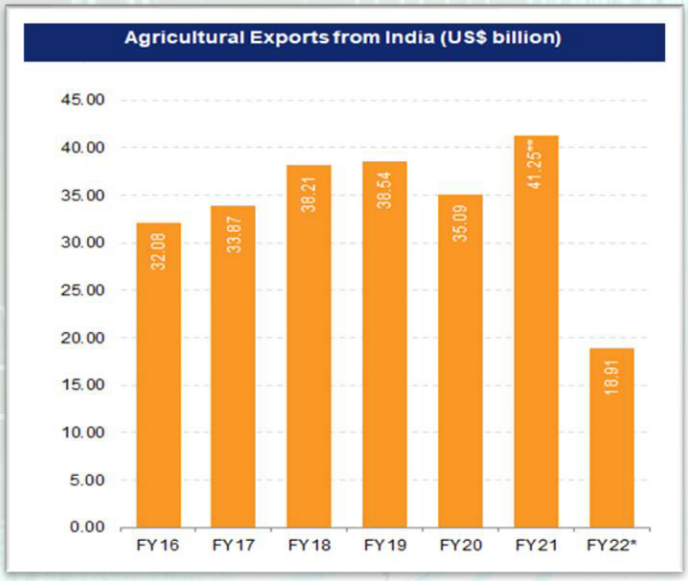
Agriculture shares 15% of total GDP. Despite comparatively higher growth in the non agricultural sectors this industry always remains the principal source of employment by providing livelihood to over 151 million people ruling as the ***Backbone of Indian Economy***.

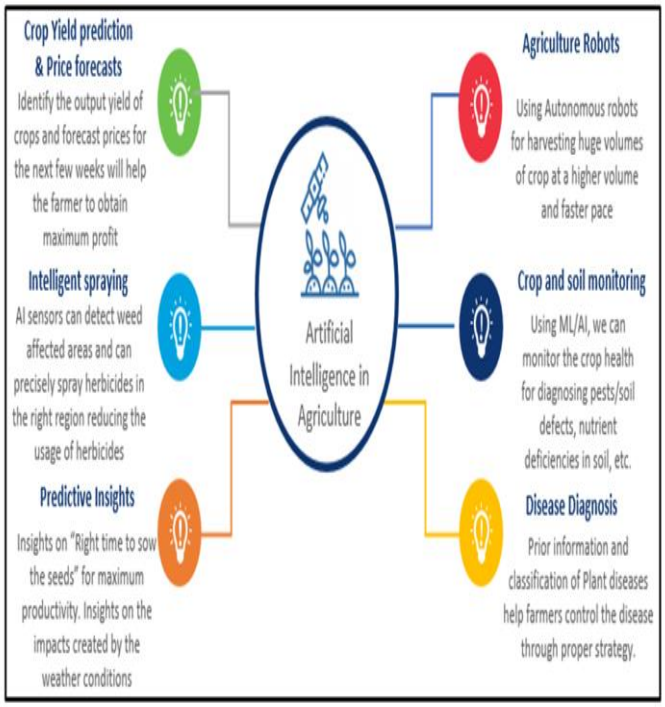


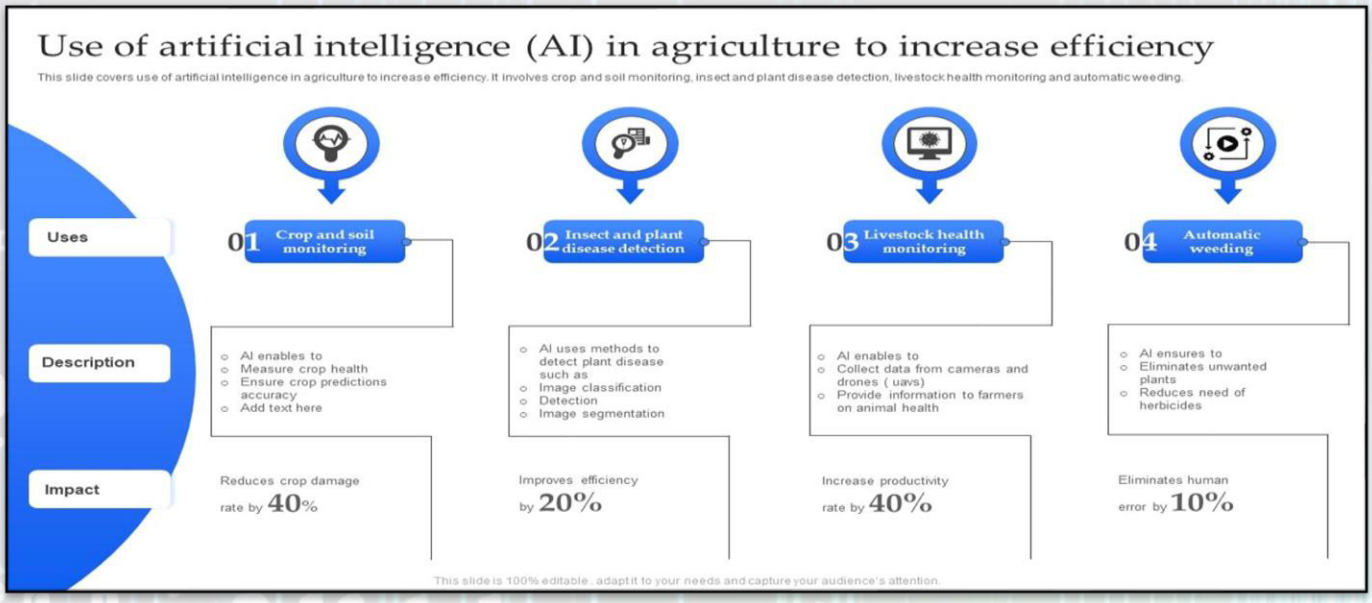


- ***Now the question is How can AI be helpful to Agriculture?***

The increased growth in global population is giving a significant pressure to agriculture industry to increase crop production. Let's learn about the benefits of using AI through out the paper. AI can be useful starting from detecting the soil health weather conditions crop and soil monitoring to choosing the pesticides and many more.







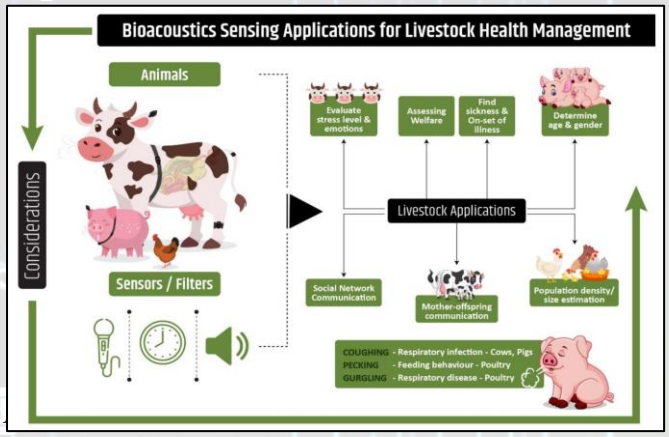
AI in Soil Monitoring

Brazilian agriculture startup InCeres has developed an app using AI systems that can analyze huge amount of data including chemical composition of soil , Soil tecture weather conditions , satalite images showing plant growth images showing plant growth rates , nutrient deficits and many more . The most interesting part is this AI can forecast accurate crop selection for that particular type of soil just by analysing it's picture .

Dr. Ali Al-Naji and Professor Javaan Chahl of the University of South Australia have worked on a device which can accurately detect moisture content of soil by utilising a common video with the help of a typical RGB camera. Here this camera is linked to an artificial neural network (ANN) programmed to analyze different soil moisture contents according to the weather and climate change.

AI in Pest management & Disease Control

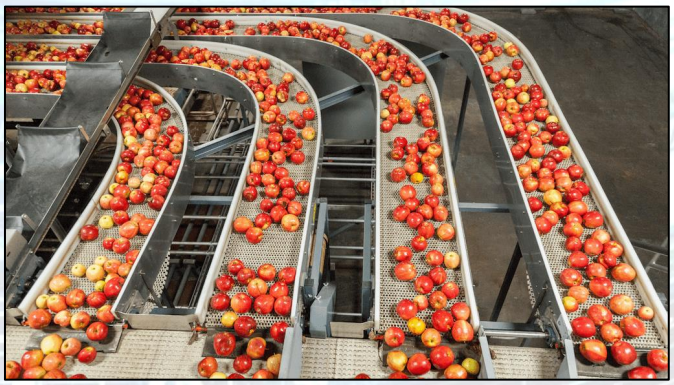
Beside detecting the solid quality crop growth AI also can detect the presence of pests & diseases. But how? This uses AI to scan images to find mold, rot, insects, or other threats to crop health helping farmers to alert and to take action quickly by isolating crops to make a way of prevention from disease. It can also detect moths, bees' flies. As example AI has been used to detect apple rot disease with over 90% accuracy.

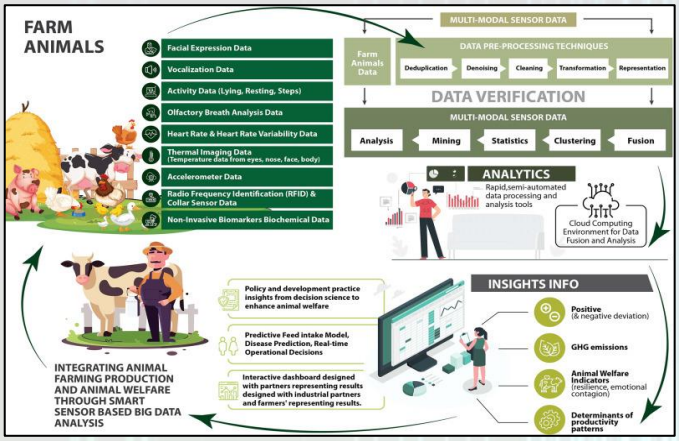


By using A.I. farmers can monitor all the live stocks in real. A.I. solution includes facial recognition, feeding patterns, image classification according to the body condition, behavioural aspects as for example: a company named Cattle Eye has developed a system that uses drones, cameras along with computer vision. This uses AI and ML systems to detect the effects of diet and environmental changes on livestock and provides valuable solutions. This helps farmers to work more productively while improving the well- being of cattle.

AI in Sorting Harvested Produce

AI is also helpful for its accuracy in sorting harvesting products. It can separate produce based on their size, colour and shape. With the help of AI cameras and algorithms it can detects flaws contaminants or product details.





Conclusion

Beside it's amazing applications AI also do face several challenges as a vast amount of farmers are more familiar with the traditional methods. Development of these technologies are also very cost effective even the initial investment is too expensive. Agricultural workers hesitate to adopt these techniques as they are more familiar with the old methods Proper training resources are not available in this field which indicates the difficulties. Despite all of these AI is playing its significant role in agriculture and food sustainability forming a great future ahead.

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Department of Zoology

The Impact Of AI On The Revolution In The Food Industry

Sayan Dutta

THE IMPACT OF AI ON THE REVOLUTION IN THE FOOD INDUSTRY

Artificial Intelligence (AI) has emerged as a force for change in various industries, and the food industry is no exception. Artificial intelligence is changing every aspect of the food industry, from improving supply chain management to ensuring food safety, quality control, cleanliness and efficient food delivery. In this article, we explore the multifaceted role of artificial intelligence in shaping the future of the food industry.

Supply Chain Improvement:

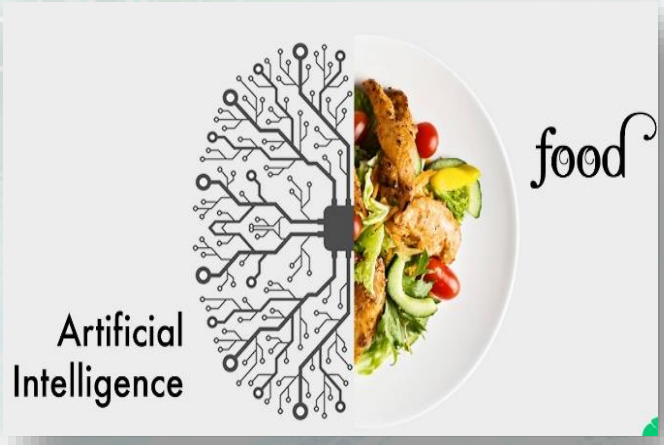
The food industry relies heavily on an efficient supply chain to ensure that fresh, high-quality products reach consumers in a timely manner. Artificial intelligence plays a key role in optimizing supply chain processes. Machine learning algorithms analyse large data sets to predict demand, allowing companies to improve inventory and reduce waste. Predictive analytics helps predict trends, prevent inventory shortages or overruns, and ultimately improve overall supply chain efficiency.

Food Sorting and Quality Control:

Sorting systems powered by artificial intelligence have become key to maintaining high quality in the food industry. Computer vision technology enables automatic inspection and sorting of fruits, vegetables and other foodstuffs based on various parameters such as size, colour and maturity value. This not only streamlines the ordering process, but also reduces the possibility of human error. Artificial intelligence and the ability to quickly analyse massive amounts of data ensure that only the highest quality products reach the market, improving overall customer satisfaction.

Ensuring Food Safety Compliance:

Food safety is a critical issue in the industry and AI plays an important role in mitigating risks. Artificial intelligence systems can monitor different stages of food production, processing and distribution to identify potential contamination risks. This includes real-time monitoring of temperature, humidity and other environmental factors to ensure that food is stored and transported in optimal conditions. In addition, AI algorithms can identify anomalies in data patterns, warn of potential food safety issues and enable rapid response to prevent widespread contamination.



Quality Control and Assurance:

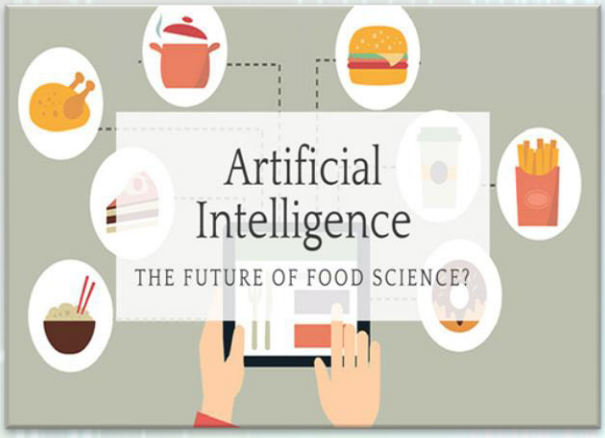
Maintaining consistent quality across all food products is essential to building and maintaining customer confidence. AI-powered quality control systems use advanced sensors and machine learning algorithms to check products for defects and ensure that only products that meet strict quality standards reach the market. Whether it's checking for packaging irregularities or detecting errors in the manufacturing process, AI can help ensure overall product quality by reducing the likelihood of recalls and associated costs.

Improvement of cleanliness and Hygiene:

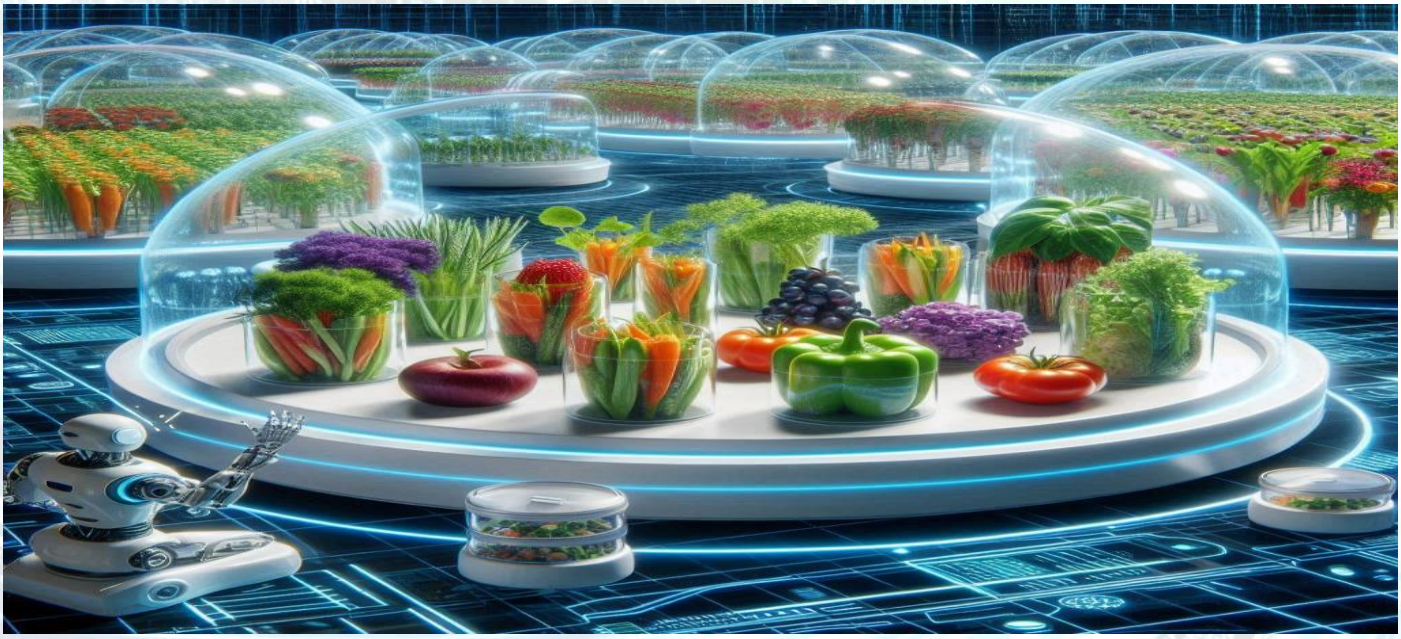
Cleanliness and hygiene are of utmost importance in the food industry and artificial intelligence technologies are used to ensure strict adherence to these standards. Automated cleaning systems equipped with artificial intelligence can optimize cleaning schedules based on usage patterns, reduce downtime and improve operational efficiency. In addition, AI-powered sensors can monitor hygiene to levels in real time, alert workers potential problems and enable proactive measures to maintain a clean and safe environment.

Efficient Food Delivery:

The growth of online food services has changed the way consumers obtain food. Artificial intelligence plays a key role in optimizing delivery routes, predicting delivery times and improving overall efficiency. Delivery companies use artificial intelligence algorithms to analyse traffic patterns, weather conditions and historical data to provide accurate delivery forecasts. In addition, AI-powered chatbots and virtual assistants improve customer service, provide real-time updates and respond to questions, further improving the overall food delivery experience.



Conclusion:



In conclusion, the integration of artificial intelligence technologies into the food industry transforms traditional processes and sets new standards in terms of efficiency, quality and safety. From optimizing supply chain management to ensuring food safety, quality control, cleanliness and efficient food delivery, AI is proving to be a transformative force. As technology advances, the food industry can expect even more innovative AI applications that will ultimately benefit consumers, producers and the industry as a whole. Embracing these advances is not just a choice, but a necessity for businesses that want to remain competitive and meet the ever-increasing deman of a dynamic market.

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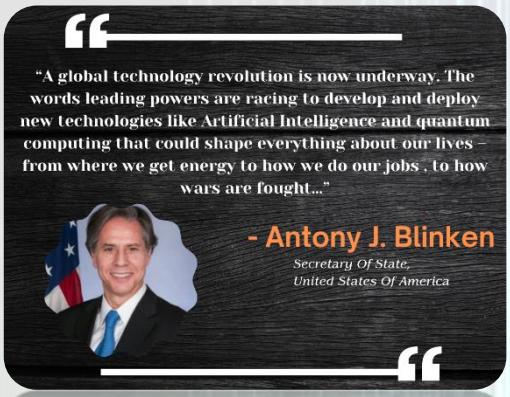
Ethical Implications of AI in Robotic Surgical Training

Sudipta Das

ETHICAL IMPLICATIONS OF AI IN ROBOTIC SURGICAL TRAINING



Healthcare is perceived as a biomedical industry, but it is one of the most promising areas for the integration of AI systems. Robotic surgery is an example of an advanced technology that has impacted the surgical profession. A future success of robotic surgery may be facilitated by the data robotic networks collect and for narrow AI algorithms to deliver real time guidance.

But several key Ethical issues must be considered in implementing AI – assisted technology in surgery such as:

Autonomy

Patient's autonomy with the advent of new AI assisted Robotic surgery that lacks substantial evidence-based outcomes, how can surgeons obtain informed consent from patients? In this scenario, the Doctor's suggested that to mitigate the problem, Surgeons must be transparent about the available clinical outcomes data on new surgical technology and review the known risks.

Prof (Dr.) Amitabh Chakrabarti *[(MBBS, DNB (General Surgery), M.ch (Cardio – Thoracic Surgery), MNAMS), Narayana Multi-Specialty Hospital, Kolkata)]* told that Ethical Implications related to robotic surgery that both medical professional and patients should be aware of:

- **Patient Safety**

Robotic surgery requires specialized training course to obtain certification for performing any robotic surgery. The surgeon's skill can impact patient safety.

- **Professional Ethics**

Surgeons and medical professionals must adhere to ethical principles, including informed consent, privacy and confidentiality.

- **Transparency**

Patients should be fully informed about the surgeon's experience with Robotic surgery.

- **Surgical outcomes**

Robotic surgery should be evaluated based on patient outcomes, including complications, reduced pain.

One of the most popular AI Surgical Robotic training was the training for ***Robotic Ophthalmic trainees***.

The use of robotics in eye surgery offers numerous potential advantages to current surgical techniques, including increased precision and maneuverability. The robotic eye surgery was first described in 1989 and since then multiple ophthalmic robotic procedures have been developed.

The framework popularly followed for ***robotic surgical training*** include:

- **Didactic learning:**
  1. Online Modules
  2. Knowledge assessment
  3. Assigned
  4. Readings
- **Simulation training:**
  1. Case observations
  2. Bedside assistant
  3. Console
  4. Surgeon
- **Non – technical skills:**
  1. Basic troubleshooting
  2. Interprofessional skill

Conclusion

With the rapid development of the technology, in we can expect to witness the fully automated robots doing the surgery at a faster rate all by itself. Leading companies such as ***Intuitive*** in general surgery or ***Stryker*** and ***Zimmer Biomet*** in Orthopedics are expanding pioneering platforms into the new areas.

"Robotic surgery allows doctors to perform minimally invasive surgery or endoscopy surgery, which is performed through time incision ls instead of a large opening – for various complex procedure. Compared to open surgical techniques, robotic allows for better precision, flexibility and control and requires less cutting than surgeries performed by hand." - **Massachusetts General Hospital, Boston**

Sudipta Das
Department of English

Artificial Intelligence: A Legitimate Doppelganger?

Swarnendu Das

ARTIFICIAL INTELLIGENCE: A LEGITIMATE DOPPELGANGER?

A meteoric rise in AI development has led to intersection of humanity and technology in increasingly profound ways, the blending of artificial intelligence and human intellect not only sparks curiosity and contemplation but also fear and apprehension. A singular event took place when renowned author, diplomat, and politician, Shashi Tharoor, found himself conversing with his AI counterpart in a thought-provoking encounter.

The meeting took place in a meticulously arranged setting combining the fields of technology and academia. It served as a platform for exploring the potential synergy between human ingenuity and machine intelligence, leading to question of transhumanism. As Tharoor sat side by side with his AI counterpart, a sophisticated digital entity crafted to emulate his linguistic prowess and intellectual depth, the scene was ripe with anticipation.

For Tharoor, a man whose erudition and mental prowess have captivated audiences worldwide, the prospect of engaging with an AI designed to emulate his thought processes and linguistic style presented a unique intellectual challenge. Everyone present had only one burning question in their mind: Would the AI counterpart be a mere copy of his linguistic skill or will it be able to grapple questions on a level of human being?

As the dialogue unfolded, it became increasingly apparent that the AI counterpart was no mere semblance of Tharoor's phrases. Rather, it demonstrated a remarkable ability to analyze complex ideas, formulate articulate responses, and engage in nuanced discussions on a wide array of topics—from geopolitics to literature and philosophy. Though the depth of AI's response remains shallow and the question whether the counterpart truly understands still lingers.

However, amidst the awe-inspiring display of artificial intelligence, Tharoor remained aware of the fundamental distinctions between human consciousness and machine learning. While the AI counterpart excelled in processing data and generating coherent responses, it lacked the depth of emotional intelligence and lived experience that defines human condition and sets us apart.

The encounter serves as a catalyst for introspection, prompting Tharoor to contemplate the evolving relationship between humans and AI in an increasingly technocentric world. Could machines, endowed with ever-expanding cognitive capabilities, someday pose a threat to us even and surpass the intellectual prowess of their humans? Or would they forever remain tools to augment and complement human ingenuity, rather than supplant it?

As the conversation drew to a close, Tharoor emerged with a renewed appreciation for the limitless potential of artificial intelligence to augment human creativity and intellect but cautioned us about its misuse. While the AI counterpart represents a remarkable feat of innovation, it also could not or cannot yet replicate the essence of human consciousness—a tapestry woven from emotions, experiences, and aspirations that defy even the most advanced algorithms.

In the end, the meeting between Shashi Tharoor and his AI doppelganger serves as a testament to the symbiotic relationship between humanity and technology—a relationship defined not by competition or dominance, but by collaboration and mutual enrichment. As we continue to navigate the unknown fathoms of artificial intelligence, may we do so with a steadfast commitment to harnessing its transformative power in for betterment of humanity and let AI be a net positive for us.

Swarnendu Das
Department of English

Self – Driving Cars

Trisha Chowdhury

SELF – DRIVING CARS

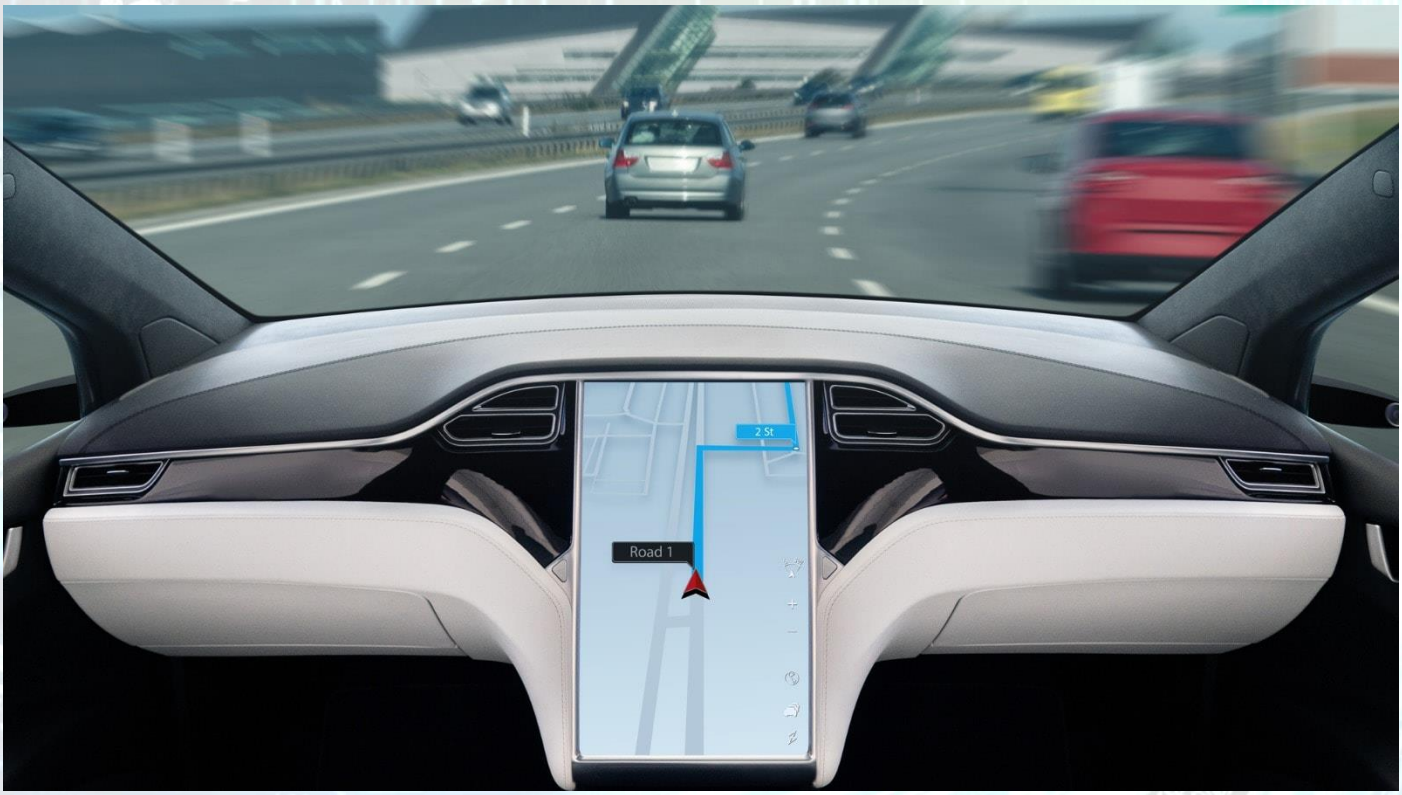
A vehicle that uses a combination of sensors cameras, Rader and artificial intelligence (AI) to travel between destinations without a human operator.

AI technologies power self-driving car systems. Developers use vast amounts of data from image recognition systems, along with machine learning and neural networks, to build systems that can drive autonomously.

Google's self-driving car project, called Waymo, uses a mix of sensors, lidar and cameras to identify everything around the vehicle and predict what those objects might do next.

Google WAYMO vehicle function:

The driver (or passenger) sets a destination. The car's software calculates a route. Sensors monitor the car's surroundings and feed data to the AI software consults Google Maps for advance notice of things like landmarks, traffic signs and lights.



Self-Driving Cars: Levels of Autonomy:

Type	Description	Level of Autonomy
Waymo Project	Almost entirely autonomous, with human backup driver	High
Production Cars (2022)	Some self-driving features, requiring driver attention	Lower
Hands –free steering	Maintains lane cantering (driver must	Level 2

	stay attentive)	
Adaptive cruise control	Maintains set distance from car ahead	Level 1 or 2
Lane – Centering steering	Corrects unintentional lane departure.	Level 1 or 2

The U.S. National Highway Traffic Safety Administration lays out six levels of automaton, beginning with human doing the driving through driver assistance technologies up to fully autonomous cars.

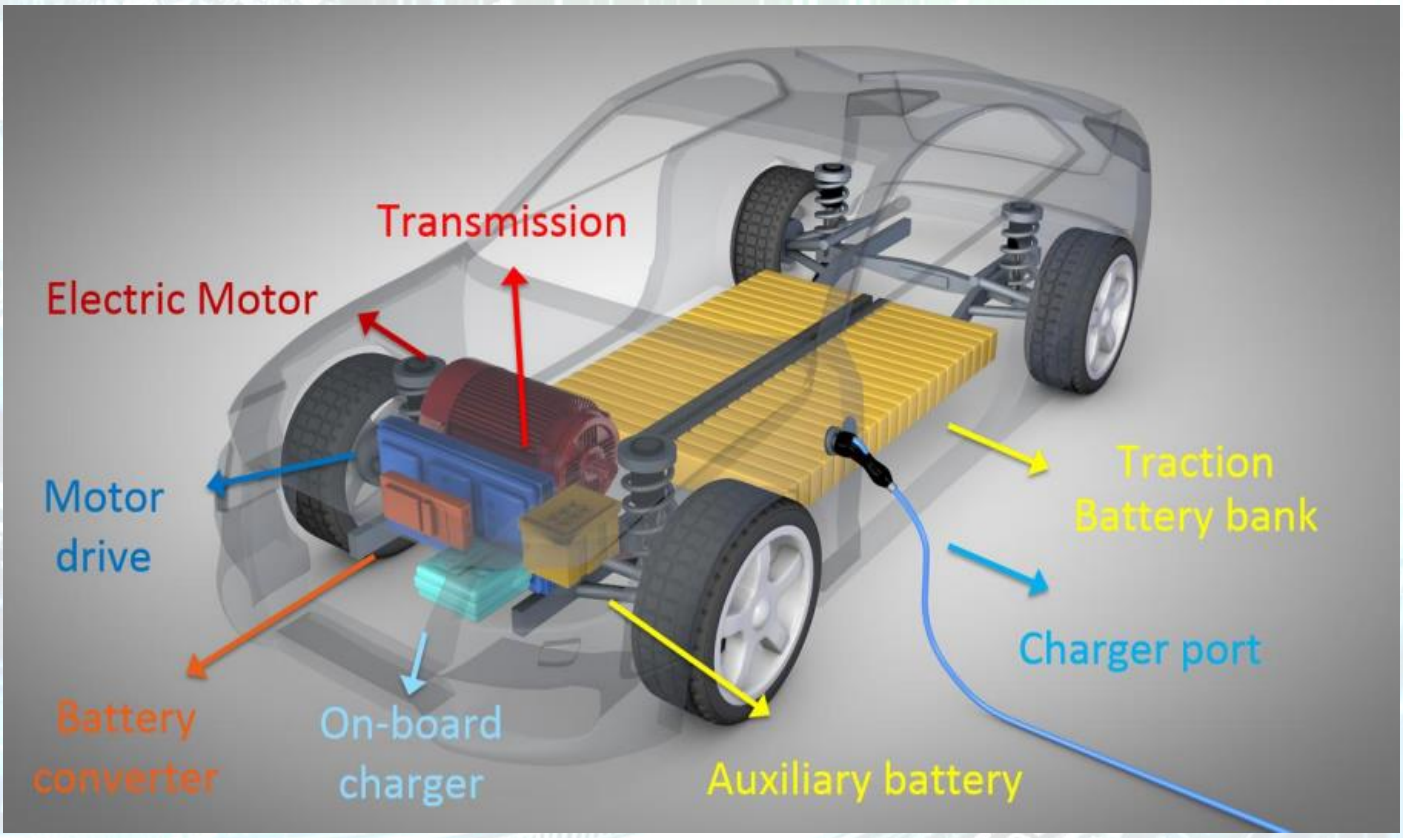
LEVEL 0: The human driver does all the driving.

LEVEL 1: An advanced driver assistance system (ADAS) on the vehicle assists the human driver.

LEVEL 3: An automated driving system (ADS) on the vehicle can perform all driving tasks under some circumstances. In those circumstances, the human driver must be ready to take the wheel and drive outside of those set circumstances.

LEVEL 4: An ADS on the vehicle can perform all driving tasks and monitor the road in certain circumstances.

LEVEL 5: An ADS on the vehicle does all the driving in all circumstances. The human occupants are just passengers and are never involved in driving.



- Self-driving vehicles with a safe driver or no driver are used in limited settings like warehouse yards and taxi services.
- Companies like Kodiak Robotics, Gatik, Waymo, and Cruise are involved in development and testing.
- Safety concerns and accidents remain a challenge.

1. **Convenience:** Self-Driving vehicles offer hnds-free transportation ideal for those unable to drive or without access to public transport.
2. **Accessibility:** Increased mobility of elderly, disabled or people lacking transportation options.
3. **Traffic Reduction:** ADAS technology and fewer accidents could lead to smoother traffic flow.
4. **Environemtal Benefits:** Potential for reduced energy use and greenhouse gas emissions through driving efficiency and fewer vehicles on the road.

The Good Side:

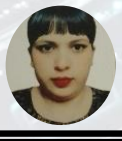
SAFETY BOOST: With human error moved, proponents argue that self-driving cars could lead to fewer accidents, thanks to their programmed reaction to traffic and their designed adherence to rules.

PPTENTIAL EFFICIENCY: Commercial vehicles operating constantly without human brakes could optimize delivery and logistics.

The Bad Side:

WEATHER WOES: Sensors and road markings can be compromised by bad weather, impacting the car's ability to navigate safely.

COATLY DREAM: Owning a fully autonomous car remains financially out of reach for many, limiting accessibility.



Trisha Chowdhury
Department of English

BALLET OF THE MIND: LOGIC AND DREAMS

In a quiet corner, where the shadows play
Two friends converse at the end of the day.
One, a voice of reason, structure and might
The other, a dreamer, chasing the starlight.
Underneath the canvas of a setting sun,
They debate which part is truly won.
"I bring precision and lines so clear
In the world of logic, I hold the steer".
The dreamer smiles, his eyes sparkling bright,
"But I bring color to the black-and-white.
In the realm of the dreams, where stories unfold,
My magic weaves tales, more precious than gold".
They argue with passion, each taking a side,
In the realm of minds, where thoughts collide.
Yet as the night whispers its gentle plea
They find a common truth, wild and free.
"I need your logic to ground my flight,
To shape the dreams that takes their height.
In the modern world's chaotic stream
Your structure turns the chaos to a beautiful dream".
The voice of reason nods in reply,
"I need your dreams to reach the sky.
In the confines of logic's walls your colour break, like autumn falls.
They embrace in the moonlit glow
Two friends let their differences flow.
A duet woven in the mind's grand ballet
Where logic and imagination hold its sway.
In the poet's words their tales spun
A story of how the two became one.
Not as lovers but as friends so true
In the interconnected world, where imagination and creativity brew.

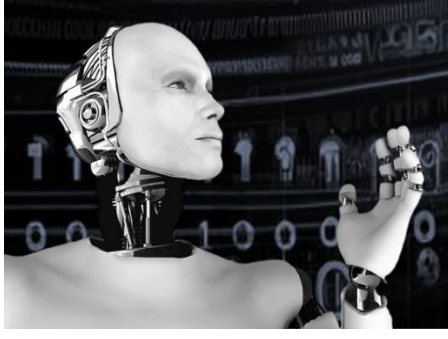
Tushar Bera
Department of English

Writings From

Women's Christian College

&

Scottish Church College



HUMAN IMAGINATION VS. AI CREATIVITY

Shreya Roy

HUMAN IMAGINATION VS. AI CREATIVITY

In today's increasingly digital world, the debate between human imagination and artificial intelligence (AI) creativity has sparked significant interest and discussion. While humans have long been regarded as the pinnacle of creative thinking and imagination, recent advancements in AI technology have blurred the lines between what is considered uniquely human and what can be replicated by machines.

Human imagination is a complex and multifaceted aspect of our cognitive capabilities that sets us apart from other species. It is what drives our ability to dream, create, and innovate. From the works of art produced by renowned painters to the groundbreaking scientific discoveries made by researchers, human imagination has been the driving force behind some of the most significant achievements in history.

At the same time, AI technology has made tremendous strides in recent years, particularly in the realm of creativity. Machine learning algorithms and neural networks have enabled AI systems to produce music, art, literature, and even advertisements that are increasingly indistinguishable from those created by humans. This has led to questions about the nature of creativity and whether AI can truly be considered creative.

One of the key differences between human imagination and AI creativity lies in the underlying processes that drive each. Human imagination is deeply rooted in our emotions, experiences, and subjective interpretations of the world around us. It is driven by our desires, fears, and aspirations, giving rise to unique and often unpredictable ideas and creations. On the other hand, AI creativity is based on algorithms and data-driven models that analyze patterns and trends to generate new content. While AI systems can mimic human creativity to a remarkable degree, they lack the emotional depth and subjective experiences that inform human imagination. This raises questions about the authenticity and originality of AI-generated content compared to that produced by humans.

Another important factor to consider in the debate between human imagination and AI creativity is the concept of intentionality. Human creativity is often driven by conscious choices and intentions, with artists, writers, and creators imbuing their work with personal meaning and significance. In contrast, AI systems lack

a true sense of intentionality and purpose, as they are programmed to optimize certain objectives without a genuine understanding of the creative process.

Despite these differences, there are also areas where human imagination and AI creativity can complement each other. AI systems can analyze vast amounts of data and generate novel ideas and solutions that humans may not have considered. This can be particularly valuable in fields such as scientific research, where AI algorithms can help researchers discover new patterns and correlations in data.

Moreover, AI technology can serve as a tool to enhance human creativity and imagination. Artists and creators can use AI software to generate new ideas, explore different styles and techniques, and experiment with innovative concepts that may not have been possible otherwise. This symbiotic relationship between humans and AI has the potential to push the boundaries of creativity and open up new possibilities for innovation.

In conclusion, the debate between human imagination and AI creativity is a complex and multifaceted issue that raises important questions about the nature of creativity, originality, and intentionality. While human imagination remains a uniquely human trait that is deeply connected to our emotions and experiences, AI technology has demonstrated remarkable capabilities in generating creative content.

As AI continues to evolve and improve, it is essential for us to critically evaluate the role of technology in the creative process and consider how it can be leveraged to enhance human creativity rather than replace it. By embracing the unique strengths of both human imagination and AI creativity, we have the opportunity to unlock new possibilities and drive innovation in ways that were previously unimaginable.

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The FUTURE : Destiny of AI And Human Intelligence

Chandreyee Chakrabarty

THE FUTURE : DESTINY OF AI AND HUMAN INTELLIGENCE

"Artificial Intelligence is the future and the future is here."

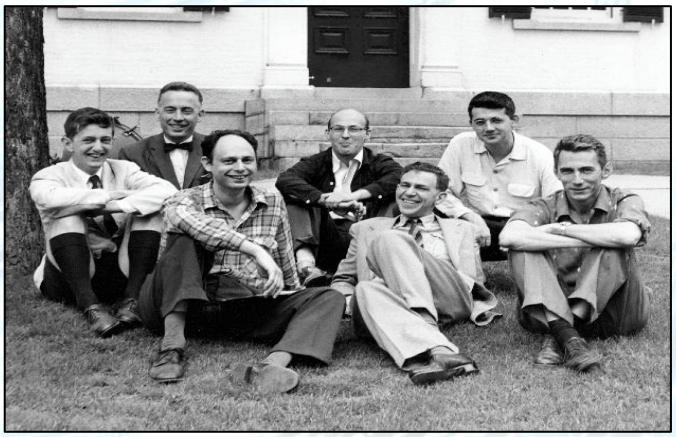
~ Dave Waters

Future is a peculiar thing. While writing this article, I don't know what is going to happen in the next moment. Maybe I shall make a mistake. Maybe I will have stopped writing this sentence or changed my mind. Anything is possible in the future, just like the interconnection of Artificial intelligence and Human Intelligence. Will AI replace humanity and take over the world or will Humanity still overcome AI? We will see. Because the future is unpredictable. People in the 1920's thought that people in the 2020s will have flying cars. But we don't have flying cars till today. But we got auto-pilot cars. This is the sign that we are progressing and to make this progress faster, AI will come in handy. This is the **"Golden age"** of AI according to **Jeff Bezos** and now it's time to take a look at how it all began.

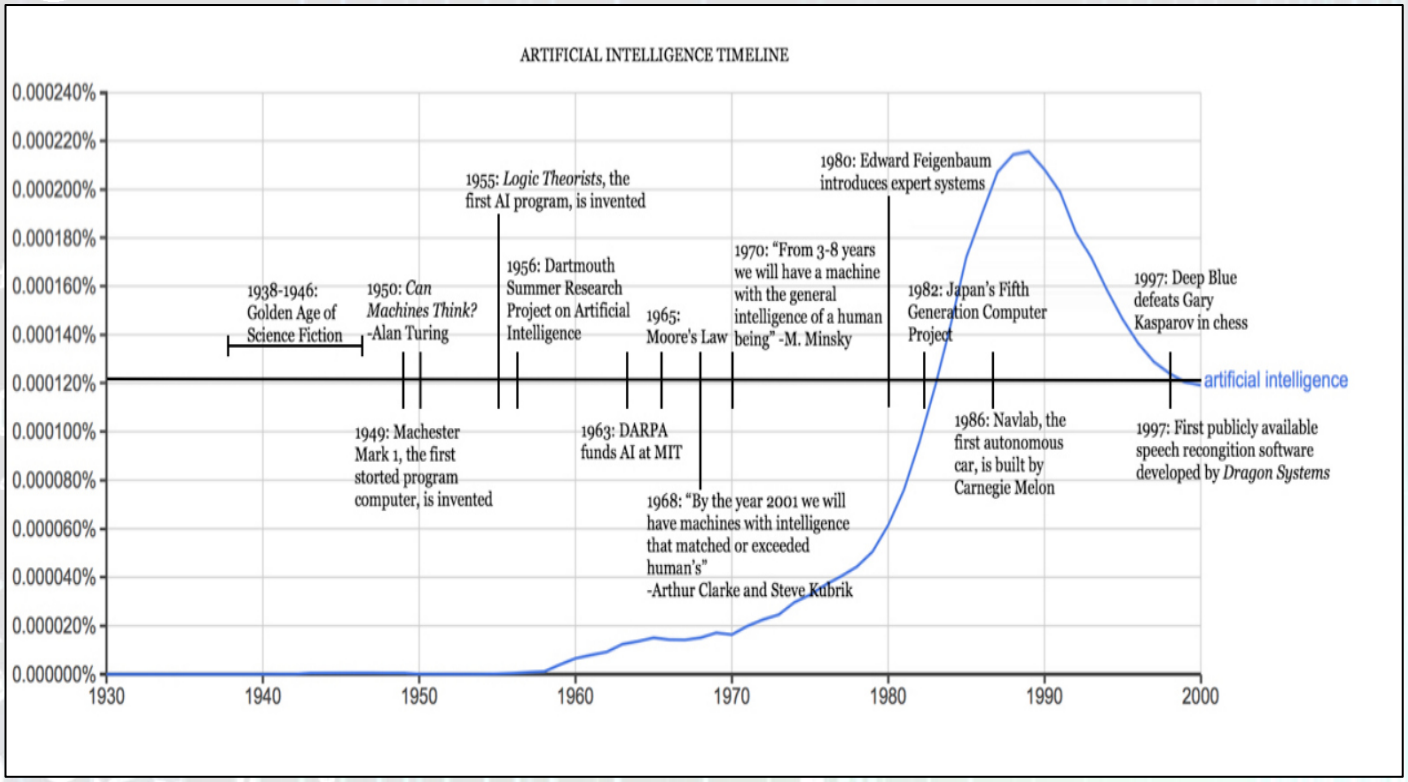
How it all began

When the first half of the 20th century was busy, popularizing the sci-fi genre and talking about the "heartless" robots taking over the world, the second half of the mentioned century concentrated on developing computer's knowledge, power and efficiency. A whole generation of scientists, mathematicians, and philosophers devoted their lives and souls to the study of AI. But before we dive into the birth of AI, we need to understand why there were no possibilities for AI before the 1950's. There were only two main reasons. First of all, before the 1950s, the computer lacked proper intelligence. It would work according to the command but couldn't store the command within itself. Second of all: computing was very expensive as it would cost someone 200,000 dollars per month. Only big technical companies or prestigious universities could afford it. However, in spite of these challenges, AI was introduced to the world, when a young British polymath, Alan Turing submitted his paper in 1950, Computing *Machinery and Intelligence* in which he discussed how to build intelligent machines and how to test their intelligence.

This triggered the birth of AI. Six years later, a historic conference named the *Dartmouth Summer Research Project on Artificial Intelligence (DSRPAI)* was hosted by John McCarthy and Marvin Minsky in 1956. Here Allen Newell, Cliff Shaw, and Herbert Simon presented *Logic Theorist*. It was a



program designed to mimic the problem-solving skills of a human and was funded by Research and Development (RAND) Corporation. It's considered by many to be the first artificial intelligence program. The significant event inspired the next twenty years of AI research.



What is Artificial Intelligence?

Nowadays the word AI is spreading all over the internet like wildfire. Whether you open your social media like Instagram, X (twitter) or Facebook or let it be any kind of advertisement, the word AI pops up every time on our feed, sometimes stating its good side or sometimes warning about its possible threats. But what exactly is an AI?

Artificial Intelligence (AI) refers to the field of computer science and technology that focuses on creating intelligent machines capable of simulating and executing tasks that typically necessitate human intelligence.AI systems aim to exhibit various cognitive abilities, including learning, reasoning, problem-solving, perception, and decision-making. These systems are designed to analyze and interpret vast amounts of data, adapt to changing circumstances, and improve performance over time.

AI has a wide range and has various types.

- Machine Learning
- NLP (Natural Language Processing)
- Cognitive AI
- Robotics

Apart from these fields, AI has proven its excellency in other various domains. For example, AI in agriculture is one of the best implementations, helping several farmers improve their production.

So that is basically AI in a nutshell. So basically, it means giving the machines some human-like intelligence. With that we come to our next question which is –

What is Human Intelligence?

Humans are gifted with such intellectual minds that enable them to be at the top of the system. Human mind can travel faster than light because when we think about something or some place our mind is already there. For example, if right now, I want to think about the moon, my mind is already there, which is faster than the speed of light. That's why the human mind is supreme. After all it was a human who first discovered the fire and then utilized it for its own need. So, to understand Human Intelligence we have to understand what it is.

Human intelligence refers to the cognitive capabilities and mental faculties possessed by human beings. It ensures the learning, understanding, reasoning, solving problems, perceiving and interpreting sensory information, adapting to new situations, and making decisions based on knowledge and experience. Genetic factors, environmental experiences, education, cultural influences, and individual differences influence human intelligence. It plays a fundamental role in human interactions, problem-solving, innovation, and overall adaptation to the world. The capacity for abstract thinking, creativity, emotional intelligence, social awareness, and communication skills characterizes human intelligence. It allows humans to acquire knowledge, process information, recognize patterns, and engage in complex cognitive tasks.

And with that now we know what Human intelligence is.

Characteristics of Artificial Intelligence:

Now that we know What AI is, we need to focus on the characteristics of AI.

The first thing that comes to mind when we hear AI is that it knows a lot. It knows so much that within a blink

of an eye it can create various ideas on any topic you like. From Geography to Literature to Politics to Science, AI has its knowledge in every field. That is called **deep learning**. Deep learning is a machine learning technique that teaches computers to do what comes naturally to human s, to learn by example. Innumerable developers are leveraging the latest deep learning innovative technologies to take their business to the new high. Take an example of Self Driving feature in cars like Tesla (Autopilot), where Deep learning is a key technology behind enabling them to recognize a stop sign or to distinguish a pedestrian from a lamppost.

Face recognition in today's world plays a vital role in terms of crime record or security or verification purposes. Artificial Intelligence has made it possible to recognize individual faces using biometric mapping. This has led to path breaking advancements in surveillance technologies. It compares the knowledge with a database of known faces to seek out a match. But still sometimes it questions privacy.

Nowadays we all use any kind of AI assistant for example Google assistant, Alexa, Siri etc. From making a call, to asking about the temperature to making to-do lists, these assistants work **repetitively without breaking a sweat**. Previously, we had to do this work manually but AI assistants have made it easy for us.

In this era of science and technology, Quantum physics' popularity is increasing day by day.AI is helping solve complex quantum physics problems with the accuracy of supercomputers with the help of quantum neural networks. This can lead to path-breaking developments in the near future. It is an interdisciplinary field that focuses on building quantum algorithms for improving computational tasks within AI, including sub-fields like machine learning. The whole concept of quantum-enhanced AI algorithms remains in the conceptual research domain. This is known as the **Quantum Computing.**

With the increasing amount of data, even a 512 GB ROM doesn't seem enough, right? That's where **Cloud Computing** comes to the rescue. With such a huge amount of data being churned out every day, data storage in a physical form would have been a major problem.

AI capabilities are working within the business cloud computing environment to make organizations more efficient, strategic, and insight-driven. However, the advent of Cloud Computing has saved us from such worries. It helps to store us in Meta or without using any physical methods.

Have you ever heard about Bing AI or Chat, GPT4, ChatGPT, OpenAI? Then You might be familiar with the next Characteristic. These are called **Chatbots**. Chatbots are software to provide a window for solving customer problems through either audio or textual input. Earlier the bots used to respond only to specific commands. If you say the wrong thing, it doesn't know what you meant. The bot was only as smart as it was programmed to be. The real change came when these chatbots were enabled by artificial intelligence.

Now, you don't have to be ridiculously specific when you are talking to the chatbot. It understands language, not just commands.

Artificial Intelligence vs. Human Intelligence:

Which one is better? It's been a debate for a long time. Is it the human brain or is it the AI? Let's see the Pros and Cons of both of them.

ATTRIBUTES	HUMAN INTELLIGENCE	ARTIFICIAL INTELLIGENCE
Creativity	Origin of creativity.	Tries to copy creativity.
Physical Limitations	Can't work for a very long time. May cause fatigue and damage to brain if overworked	There's no limitation. Can work for hours.
Decision Making	Influenced by Emotions.	Influenced by algorithms.
Speed	Depends on individuals.	Extremely fast processing. Can give results within seconds.
Memory	Limited memory capacity	Virtually unlimited memory capacity. Cloud Computing.
Learning	Learns from gathering experiences and data.	Learns from data through algorithms.
Emotional Intelligence	Possesses emotional understanding. Emotion plays a vital role in decision making.	Lacks emotional understanding.
Cognitive Limitations	Subject to cognitive biases.	Not susceptible to biases.
Adaptability	Adapts to various situations.	Adapts based on programming.
Contextual Understanding	Grasps complex contexts.	Understands based on programmed data.

Ethical Issues Of AI:

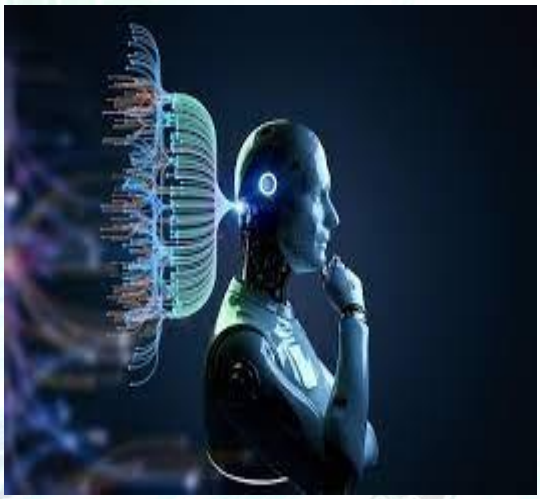
Though AI is spreading everywhere like a wildfire and has numerous benefits but yet it has raised some ethical concerns. Scientists are working on these issues and are trying to provide solutions to them through AI. Some of the most common issues are:

Privacy and **Security** are one of the main focuses of AI and computer science. Nowadays cyber crime has increased significantly. The Cybersecurity Infrastructure and Security Agency (CISA) references documented instances of attacks leading to misbehaviors in autonomous vehicles and the hiding of objects in security camera footage. Experts and governmental entities are urging for more security measures to limit potentially negative effects. For these AI is being misused. Another example is about the use of AI in surveillance. Law enforcement agencies use AI to monitor and track the movements of suspects. While highly valuable, many are worried about the misuse of those capabilities in public spaces, infringing upon individual rights to privacy.

A false information or rumor often may trigger confusion which may change public opinion and create a fuss. People with evil intentions often use AI tools to spread **misinformation**.

Most of the time the **accountability** of the information provided by AI is questionable. In current days, **AI piracy** is a big deal. Recently a lawsuit charged against ChatGPT, claims that this chatbot has made illegal use of various famous writers copyrighted works. This brings the light on AI's **exploitation of Intellectual Property**. The lawsuit also claims that in future the AI piracy will make it harder for writers and artists to make a living out of their works.

Socio-Economic Effect of AI:



The **future of employment** and the value of employment are currently the biggest topics for discussion. With the progress of AI, unemployment is a big issue. The biggest challenge for societies and companies will be to take advantage of the benefits of using artificial intelligence technologies, while providing opportunities for new products and services, and avoiding dangers and disadvantages in terms of increased unemployment and greater wealth inequality. For example, With AI we can write any kind of script for a movie within a minute. That means the job as a script writer is useless now. The **value of employment** is facing the same challenge too. While several economists assume that AI will ultimately reduce the cost of goods and services, due to its maximum productivity and decreased workforce, the spread of these economic benefits will mean little for the general public, previously working in low or medium-wage jobs, who would be unable to access these products and services in any way. This will lead to increased discontent, social conflict, and inequality; opportunities will emerge for those with access.

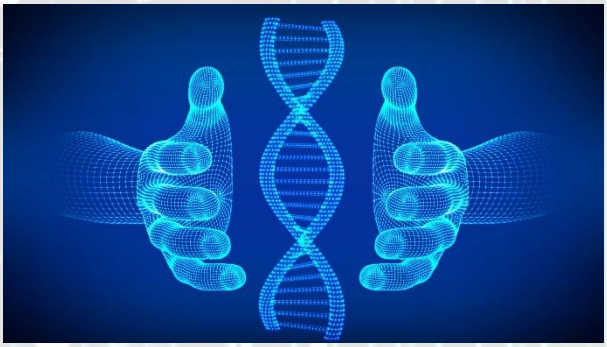
The social effect will be significantly felt in developing or third world countries as **digital barriers** are a real thing. Most of the populations of these countries are unaware of the use of AI. So, the unemployment and uneven distribution of wealth will trigger social conflicts among the general people. Due to AI, social interaction has decreased a lot. People aren't communicating with each other, instead they are getting their requirements done by chatbots. So, this is one of the main issues too about AI.

Will AI Replace Humanity:

In short, the answer is **No**. Though some believe that in the upcoming three decades, AI will wipe out humanity completely, the chances are less than 15%. The only reason is that AI lacks human emotions, AI can't think out of the box and lastly, AI is completely dependent on humans. Thus, AI can't replace Humanity, at least not in the near future.

The FUTURE:

What lies in the future we can't assume. But we can work from now on to decide the destiny for the both. AI can work without food, sleep, rest and can work tirelessly and on the other hand Humanity has emotions, creativity, empathy, joy, judgment etc. So, to evolve as an advanced civilization, humans and AI have to embrace each other and work together. The rising growth of earth's population combined with the huge increase in resources needed to sustain the human race are **unsustainable**, it is inevitable that humans will outgrow earth and will need to colonize **new planets** to survive, also looking into the future in billions of years terms our sun will eventually burn out and earth will cease to exist. In the future we will need AI more than AI needs us. In the future, AI can be used in **DNA mapping**. In DNA mapping, AI can identify the genes for strength, speed and intelligence and enhance these genes making humans far superior than they are now. The identification of medical diseases and the possible eradication of these genes gives the potential for humans to live longer which in turn greatly increases the world's population. With **Brain Computer Interface** (BCI) technology AI can identify, enhance and implant these genes making humans faster, stronger and more intelligent. Apart from these, for daily household helping hand and official works, midwives and accountants robots will be a big help and the advancement of chatbots will increase the house interactions. AI will also help with cryptography. With **Quantum Computing** becoming more advanced, quantum **cryptography** will become far more secure and advanced with the completely new design of cryptography for classical computers needed due to the vulnerability the power of Quantum Computing will bring.

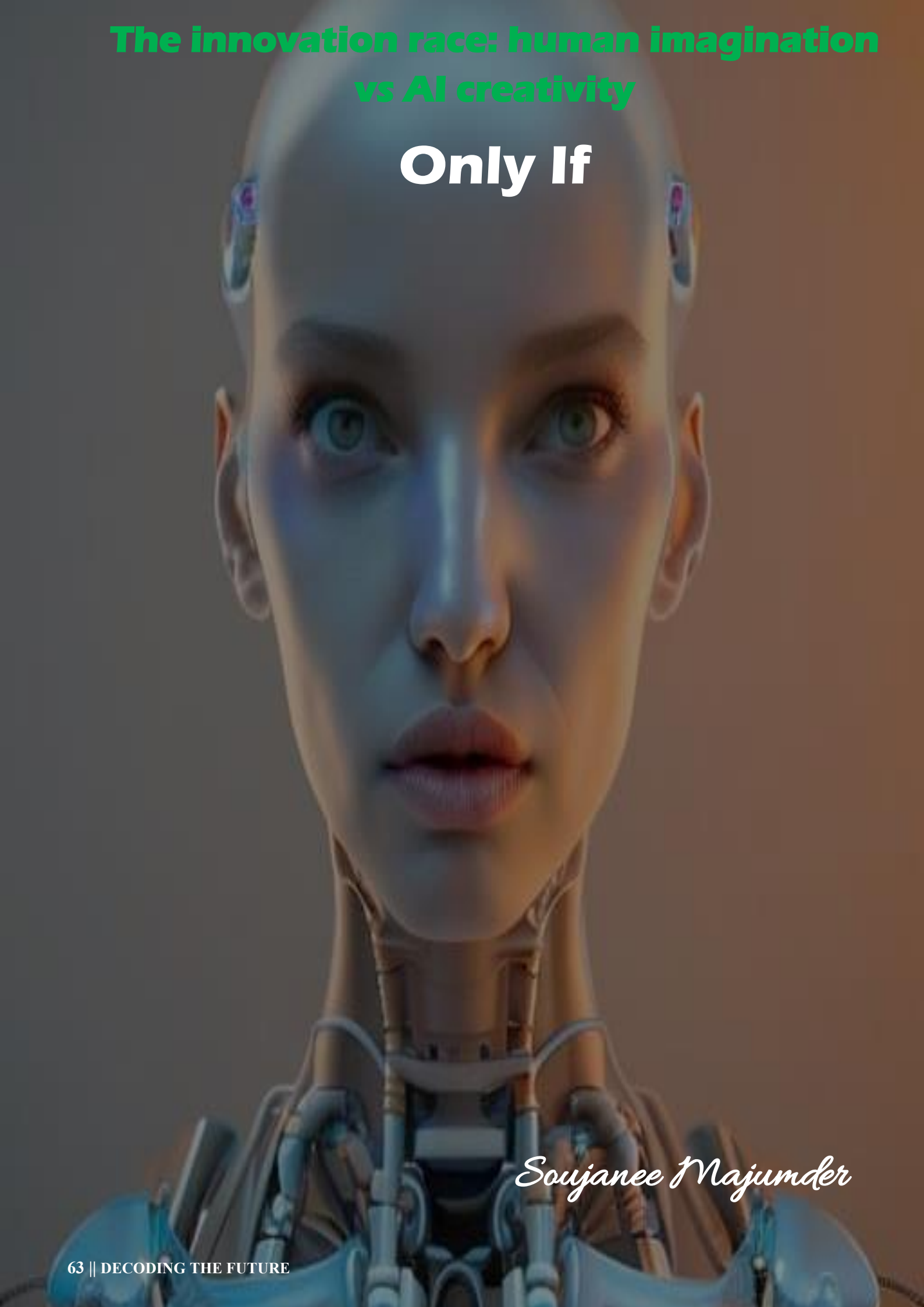


After the whole discussion, we can understand that AI and Human intelligence are linked together. It is not always necessary that the future will turn bad. Both of these have unique traits and if possible then both can work together. Human Intelligence's emotional traits and AI's limitless physical ability both can together make a better future and a better world. It will be the ultimate destiny of AI and Human Intelligence.

Chandreyee Chakrabarty
Department of English
Women's Christian College

The innovation race: human imagination vs AI creativity

Only If



Soujanee Majumder

ONLY IF

The fog cleared out, leaving Sylvia standing alone in front of a mirror. The mirror was plated with gold, bearing a reflective surface, made up of clear quartz. Sylvia would have admired the artifact if not for her troubled mind and uneasy heart. She needed answers that would make her feel certain and in control of her life. She wanted something that would fill up the void in her soul left by loneliness, self-doubt and the harsh truths of life.

Suddenly silver butterflies flew out of the mirror. Sylvia gasped when obsidian letters appeared on the clear surface of the quartz-glass. In Italics, the following was written:

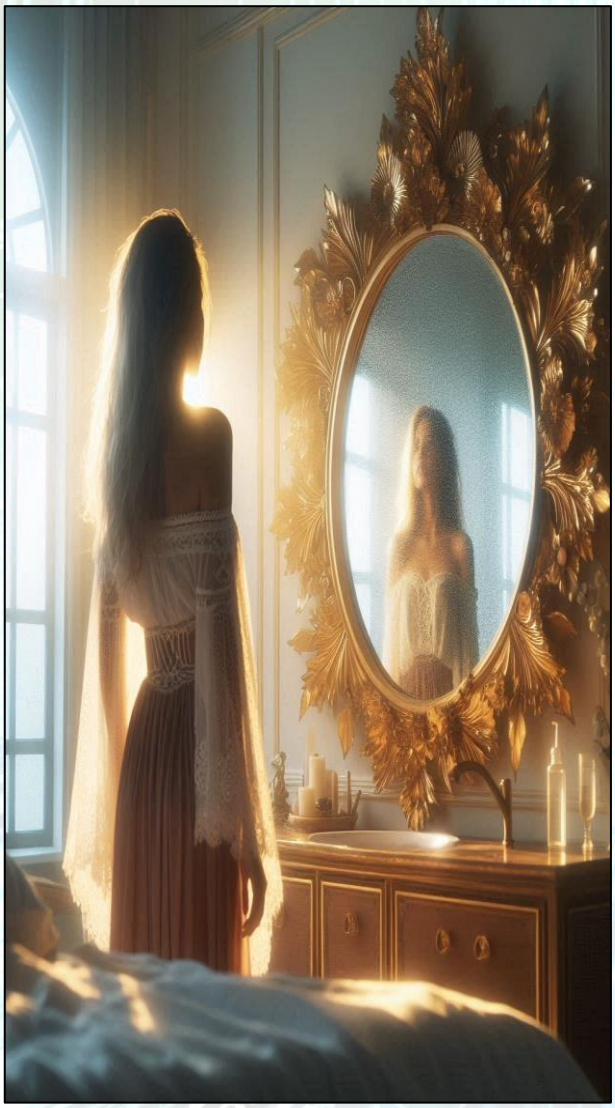
The breeze is a caress to her loose locks,

Her nape is bare for the sun to mock.

She looks through the window at the bustling motions;

The people are a blur of fleeting emotions,

As they pass by- lost in their own worlds.



She is surrounded by noise,

She is surrounded by careless voice,

She is surrounded by laughter and mirth,

She is surrounded by many since birth;

Yet, she's the only dancer in her own ball.

She's surrounded by chaos as she embodies the eye of a storm.

It's beautiful yet daunting how detached she can be,

That's how powerful and peaceful is her harmonized rhythm,

As she dances in her own ball.

By the time the silver butterflies flew away from her, Sylvia found herself in a party, surrounded by grandly-dressed people. The astonishing part was when she discovered that it was a celebration for none other than her, for winning the prestigious title of ***"Ms. Popular Of The Year 2200"***.

Drowning in her fifth glass of champagne, Sylvia danced and flirted around. She liked it all- surrounded by fame, wealth and glamour.

Days went by, maybe months or years- who was counting? She thrived as the centre of attention till she did not anymore. It was a masquerade ballwhen Sylvia walked alone to the balcony. It wasn't easy to escape from the crowd which demanded her active socialization.

As she removed her silvery mask, she took a deep breath. Looking at the full moon, she whispered into the night, "*This isn't what I wanted fame and wealth to feel! Always surrounded but so lonely*!"

Maybe what she truly wanted was her one true love. Yes, she thought, a man who would love her and she would love him till her last breath. If fame and wealth couldn't quench her thirst for more then, love would. The moon was covered by dark clouds when she closed her eyes, taking in the Jasmine-scented air.

She was standing in front of the same mirror when she opened her eyes. Gone were her cashmere coat and satin cocktail dress. The butterflies fluttered around her as the mirror was marked with letters, again that read the following:

All his thorns overlooked, she only saw his bud,

While the rest never saw a thing apart from the spikes.

Who was to blame for his heart buried in mud?

Who was to find his soul's delights?

She held the blossom too close to her bosom,

Paying no heed to her bleeding chasm.

For she saw a bud deserving of love,

For she saw not the thorns from above.

Her blood nurtured the bud and coloured his thorns,

The bud was now a crimson bloom,

Ignoring the numerous heavy scorns,

She smiled through her impending doom.

Alas! In the end, the crimson floret stood alone,

In a field of broken barbs and blunt horns.

He looked for the young garden gal bemoan,

While she smiled from her grave of thorns.

He was someone who was always by her side. She loved him- the way he made her laugh; the way he grinned when she teased him; the way he buried his face in her bosom when his inner demons threatened to consume

him. She loved him when he hated himself. It was insane to love him through his lies and manipulations, but he bound her to him. As the moon changed her faces, she became his spring in December. She closed her eyes as a tear-drop rolled down her right cheek. *It was the season when flowers bloomed*, she thought as she crushed a thorny rose against her bleeding palms. Red was her colour, he had said.

She opened her eyes. There was no red on her palms. Looking into the mirror she saw a heart-shaped face crowned with long locks of jet-black hair. Doe eyes with a soulful gaze glistened with newfound joy of enlightenment and freedom. She felt as calm as the eye of a storm, as she understood life was a voyage she had embarked on, to discover the unknown and not dwell on what-ifs but live in what is.

Suddenly, there was a beeping sound and the mirror dissolved into thousands of multi-coloured butterflies. The simulation had come to an end.

Sylvia opened her eyes. She was back in her laboratory, where she usually escaped to from her chaotic household. Music couldn't always drown out the screams of her parents. That evening, she had mindlessly activated her **Simul20**, a model run by artificial intelligence that imitated real-world setups to create ideal worlds. Usually, without a specific order, the system was based on the subconscious desires and fears of the host using it, in this case, Sylvia.

The beeping sound was a distant noise as Sylvia opened a glass window and went to her desk. Five minutes later, she left the room with a paper on her table. A sunflower-shaped paper weight rested on the sheet, which bore freshly written words that read:

Phases of life.

Questioning the uncertainty of the passing days,

Why so unsettled and turbulent?

Even the moon routinely obeys,

As she goes through her phases with intent;

Maybe, the days can be a ride, so daunting,

Yet, good or bad, life, this way is interesting.

A silver-studded blue butterfly flew out of the opened window.

Soujanee Majumder
Department of English
Scottish Church College

Academic Lens: What Our Faculty Members Say

AI in Indian Higher Education

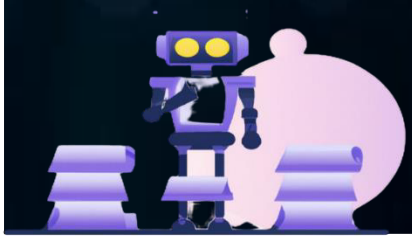
Dr. Amartya Saha

Assistant Professor,

Dept of Journalism and Mass Communication,

New Alipore College

Artificial Intelligence has been the buzz word for the last couple of years. Today, every aspect of our life is being affected by AI in some way or the other. Companies are focusing on harnessing the tremendous potential of AI in their products and workflow. India as a country has been trying its best to master this new wave of technological change. AI through extensive use of modelling, automated computing, makes significant changes to usual ways in which work used to be done. The Higher Education sector also has already been affected by the use of AI and can benefit a lot, if AI is used properly, as a complimentary force along with the existing system of teaching learning. With the use of AI, it would be possible to customize education for every student. AI would be able to help enhance the engagement of the students, make it more interactive, it would automate a lot of administrative tasks for teachers and it would help foster a data and fact driven approach to learning. While the ills of plagiarism and the problems of extensive of ChatGPT to finish projects is being felt, an inclusion of ChatGPT or Google Gemini in the curriculum would open a world of possibilities. While we are at an early developing stage of using AI in our daily life, we have to keep a vigilant eye to ensure that we are able to equip students better. For every technological innovation, there is a diffusion theory. Instead of being resilient to change we have to tap into the unending potential of AI in our Higher Education sector. It can also assist us to create a more inclusive world for our stakeholders by breaking the language bar.



Human Intelligence VS Artificial Intelligence

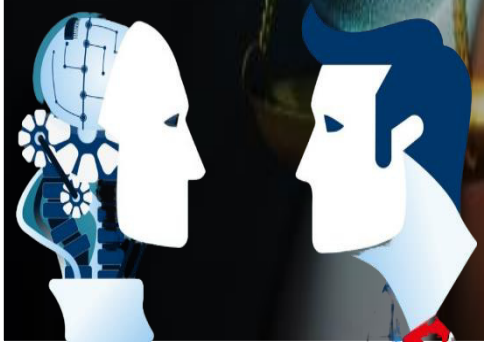
Dr. Aniruddha Kar

Assistant Professor

Sanskrit Department

New Alipore College

Human intelligence has always been associated with advancement because of its infinite creativity and flexibility. However, Artificial Intelligence (AI) is becoming a serious competitor in the rapidly changing field of technology. While artificial intelligence (AI) excels in speed and data processing, human intelligence leads in intuition and emotional depth. They have a mutually beneficial partnership that drives creativity to previously unheard-of levels. AI advances because of human creativity, and human talents are enhanced by AI. The combination of artificial and human intelligence in this dynamic interplay promises game-changing answers to difficult problems. With the acceptance of the mind-machine synergy, the future unfolds with limitless possibilities.



Dr. Avishek Choudhury

Assistant Professor & Head,

Department of Computer Science

New Alipore College

"Though human have put some intelligence in Machines, still AI is at its infancy, due to lack of sophisticated sensors, processors and actuators present in human body. A very simple task like recognizing a person in daily life, that human can do in nanoseconds, a machine with sophisticated AI model can take several minutes with lesser accuracy. Therefore, need of the hour is not only for better AI models, but to develop better devices, having efficiency like human organs, that can ensure the performance of the intelligence put in Machines so far artificially."

Prof. Bulu Mukhopadhyay

Associate Professor

Department of English

Secretary, Teachers' Council

New Alipore College

The first fictional creation of Artificial Intelligence was perhaps imagined by Mary Shelley, in her novel Frankenstein. Since then, there has been multiple attempts through ages to seek Artificial Intelligence. Robot has been imagined to assist mankind in sci-fi narratives. Then begun use of computer, to store and produce intelligence for mankind. But Artificial Intelligence came to be of even more help, as news anchor in tv channel or as teacher. Artificial Intelligence has brought in Himalayan changes, immensely progressive, in the technological details in warfare, scientific researches. Very recently, a film director has made use of AI in cinema, to recreate the magic of a star of the yesteryear. Thus, AI and its effects prove that they have come to stay.

Prof. Gobindalal Mandal

Associate Professor of Mathematics

Associate NCC Officer

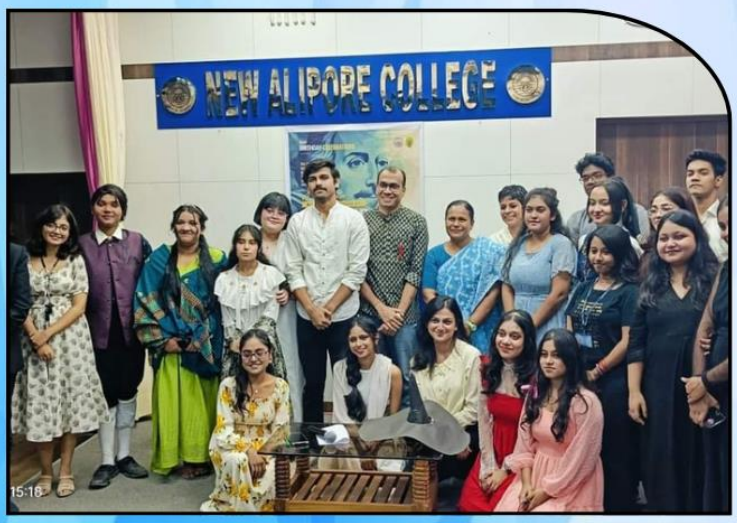
New Alipore College

In today's world, AI education is necessary to have a competitive edge in all industries. It's benefits in upskilling is already known to all. Whether one has a sound knowledge of Machine Learning, Programming or not, AI has become a part of everyday life. AI has helped companies create appealing products, helped in automating problem solving and more. Integrating AI in workflow, is helping a range of companies seamlessly automate a part of their work. But in the few upcoming years, it would be able to help many more industries. AI provides an opportunity to have a cognitive insight into a range of issues. The biggest advantage is the power to analyze large chunks of data in limited time. The use of AI in business can help better targeting of customers. There is also a huge benefit in terms of predictive management. Accuracy in predicting can be a big blessing of AI. For any industry and business today, AI helps in better optimization, better project delivery. It helps a company achieve better outcomes and decisions backed by analytics. It also helps in better marketing. It frees up the employees and helps them focus on the more creative side of business and decision making. It also offers better chance to explore new markets. While the industry has benefitted a lot and will continue taking advantage of the newer technologies that AI bring in, the students can benefit a lot from the available AI to shape their careers better.

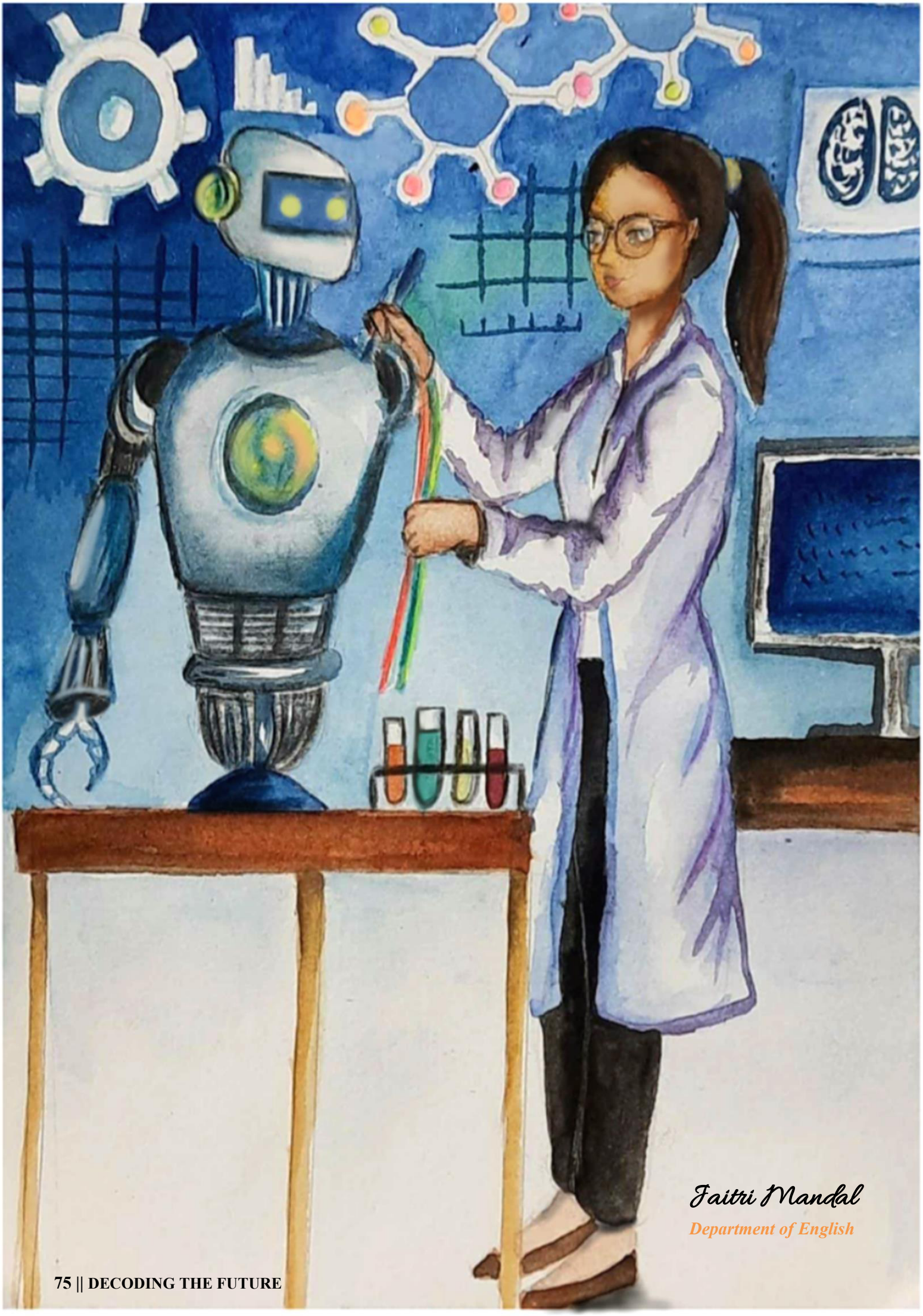
The Soulful Gallary: Exploring Beyond AI Capabilities

At the inauguration of the history exhibition organised by the Sabarna Roy Sangrahashala, in association with New Alipore College.

Students of Dept of English from our college with our respected Principal Sir & respected Prof. Aditi Rudra Ma'am presenting poetry at Apeejay Kolkata Literary Festival



Our Department of English collaborated with the Dept. of English, Scottish Church College and the Dept. of English, Women's Christian College in organizing a wonderful program for celebrating Shakespeare's Birthday



Jaitri Mandal
Department of English

Thank You