

Tryst with Advanced Intelligence



FR. JOHN FELIX RAJ
& SOVIK MUKHERJEE

Artificial Intelligence (AI) is advancing at a breakneck pace, sparking concerns about the potential development of advanced intelligence. Despite warnings from social scientists and AI specialists, the general public seems indifferent. Skeptics argue that AI poses no real threat, citing humanity's history of successfully harnessing and profiting from disruptive technologies.

To maintain its competitive edge, the US has taken steps to restrict the supply of GPU chips to other entities. However, details about the USD 500 billion plan named "Stargate" are unclear. Meanwhile, China is rapidly advancing its AI capabilities. Following DeepSeek's global success, China's top economic leaders have pledged to establish a state-backed fund to drive technical innovation.

France and India's joint chairing of the current AI Summit in Paris marks a significant milestone in their collaboration on artificial intelligence. India's commitment to AI development is evident in its initiatives such as AI2, which focuses on Artificial Intelligence with 'Aspirational India', and the establishment of 'Atal Tinkering Labs' in schools. These efforts aim to foster innovation and prepare the next generation for an AI-driven future.

Other countries like South Korea, Japan, Israel, Singapore, and the UAE are also investing heavily in advancing their AI capabilities. The AI Action Summit in Paris saw the launch of the Coalition for Sustainable AI, which aims to promote sustainable AI practices, and the Current AI Foundation, which focuses on developing and supporting large-scale AI initiatives that serve the public interest.

AI is evolving rapidly, sparking global competition as nations invest billions and debate regulations to balance innovation, security, and ethics while dealing with its potential risks and transformative power

The summit also highlighted the need for global cooperation in AI development, with Prime Minister Modi advocating for a global governance structure that promotes innovation while ensuring fair access, especially for developing countries.

Speedy Advances: Recent Developments

The AI landscape is evolving rapidly, with recent breakthroughs poised to revolutionise the field. Google's announcement about its quantum chips is expected to accelerate AI advancements, bringing advanced intelligence closer to reality.

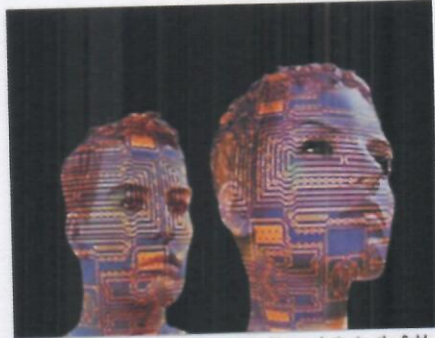
Late 2024 saw the introduction of OpenAI's o3 model, boasting improved reasoning abilities. This was followed by Google's Gemini 2.0 Flash Thinking model, Amazon-backed Anthropic's Claude 3.5 Sonnet, and Meta's Llama 3, 3.1, and 3.2. The AI race, which began in November 2022, is gaining momentum with Chat GPT 4o and OpenAI o1.

China has made waves with DeepSeek, an open-source, affordable programme

that's generating significant interest worldwide. As AI becomes increasingly accessible on smartphones, personal computers, and laptops, the amount of data it collects is growing rapidly, along with its networking-enabled capabilities.

Following Trump's presidency, Elon Musk has made significant strides. He successfully installed 100,000 Nvidia H100 GPUs on the state-of-the-art Colossus computer in just 19 days. The system is being upgraded to 200,000 GPUs with the newer, faster H200 models. Meanwhile, Meta is investing USD 10 billion in a complex in Louisiana.

What is Advanced Intelligence?
Advanced Intelligence refers to a revolutionary technology that surpasses the capabilities of current Artificial Intelligence (AI). While



The recent breakthroughs in AI are poised to revolutionise the field

Unlike AI systems, which rely heavily on large datasets to learn, Advanced Intelligence is designed to learn from diverse sources, including human input, feedback, and real-world experiences

AI excels in performing specific tasks. Advanced Intelligence aims to replicate the full spectrum of human cognitive abilities, including creativity, intuition, and emotional intelligence.

The primary distinction between AI and Advanced Intelligence lies in their degree of human-like intelligence. Current AI systems are designed for specific tasks, whereas Advanced Intelligence is intended to be more general-purpose, capable of reasoning across various domains and solving complex problems. It integrates human values and preferences into decision-making, making it more responsive to human needs.

Unlike AI systems, which rely heavily on large datasets to learn, Advanced Intelligence is designed to learn from diverse sources, including human input, feedback, and real-world experiences. This unique approach enables Advanced Intelligence systems to incorporate human values and preferences, making them more responsive to

human needs.

Advanced Intelligence holds tremendous potential as a game-changing technology, poised to tackle some of humanity's most pressing challenges, such as inequality and climate change. While this field is still in its infancy, ongoing research and development are crucial to unlocking the full potential of Advanced Intelligence.

Pressing Issues and Concerns

As Advanced Intelligence continues to evolve, it poses significant concerns that must be addressed. With its potential to create artificial beings that can perform cognitive functions akin to human minds, Advanced Intelligence raises important questions about its impact on society.

The relationship between Human Intelligence (HI) and Artificial Intelligence (AI) is often debated. While some argue that AI is an extension of HI, others contend that Advanced Intelligence could potentially replace HI. This concern is exacerbated by the fact that Advanced Intelli-

gence combines the capabilities of both AI and HI, leading to unintended consequences.

Societal Implications
The advent of Advanced Intelligence poses significant societal risks. If companies fail to upskill their workforces, this could result in higher unemployment and decreased opportunities for marginalised groups to break into tech. Furthermore, the automation of jobs can potentially lead to widespread unemployment and social unrest.

The spread of deepfakes also threatens to blur the lines between fiction and reality, leading the public to question what's real and what's not. Additionally, data security breaches will have a higher chance of occurring, which could expose consumers' personal information.

Ethical Concerns

The development and use of Advanced Intelligence also raise pressing ethical concerns. The potential for autonomous weapons to fall into the wrong hands amplifies risks to civilians. Moreover, the diversion of resources into Advanced Intelligence could potentially neglect other technologies and industries.

The misuse of AI to violate people's privacy and spy on them is another concern, undermining individual freedom. Many experts, including technologists, journalists, and political figures, are sounding the alarm on AI's potential pitfalls, including weakening ethics and human values. Advanced Intelligence could make matters worse.

Furthermore, the increasing reliance on Advanced Intelligence could have a profound impact on human values and creativity. Applying advanced intelligence for creative endeavors could even diminish human creativity and emotional expression. Interacting with such systems too much could also lead to reduced peer communication and social skills.

In response to these concerns, Pope Francis has called for the creation and adoption of a binding international treaty to regulate the development and use of AI. This sentiment was echoed in his message for the 2024 World Day of Peace and in a 2023 Vatican meeting.

Conclusion

Have humans inadvertently created an Advanced Intelligence that can jeopardise their own existence? The answer is no. Maybe, humanity is subject to some amount of risk. But not to the extent of existential crisis.

It is essential to remember that machines, no matter how advanced, are still just machines. They can simulate emotions, but they lack human consciousness. As the saying goes, "prevention is better than cure." We must ensure that machines serve humanity, not the other way around.

The fusion of artificial intelligence and human intelligence has given rise to Advanced Intelligence, a technology with vast potential to transform various aspects of our lives, including healthcare, education, climate change, robotics, fintech, energy management, and more.

By acknowledging both the benefits and challenges of Advanced Intelligence, we can harness its potential to create a more sustainable, equitable, and prosperous future for all. As Jesus once said, "No servant is greater than his master, nor is a messenger greater than the one who sent him." Let us maintain this perspective as we navigate the rapidly evolving landscape of Advanced Intelligence.

Fr. John Felix Raj is the Vice Chancellor of St. Xavier's University, Kolkata, and Sovik Mukherjee is an Assistant Professor of Economics in the Faculty of Commerce and Management at St. Xavier's University, Kolkata. Views expressed are personal