



A REVIEW OF THE ROLE OF PHILOSOPHY AND THE USE OF AI IN NIGERIA

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Abstract

The philosophical study of knowledge engineering or artificial intelligence has been long to philosophy of mind and is rooted in the philosophy of computer science that explores computational intelligence and its implications for human understanding and knowledge about “consciousness”, “ethics”, “intelligence”, “epistemology” and the “concept of freewill”.

As AI is now a discipline of considerable global interest to scholars and philosophers especially as a phenomenon that relates to the creation of artificial life and creations; these factors has also underscored the need to interrogate the emergence, values, ethical and social acceptability of the new scientific and technological phenomenon.

Amongst other issues, the philosophy of AI interrogates human concerns and questions such as

- Can a machine develop a mind on mental consciousness the way human being do.*
- Is the human intellect or brain the same as machine intelligence?*
- Can a machine resolve existential problems the same way that a human person would solve same by thinking?*

Questions identified above has continued to generate different reactions from cognitive scientists, philosophers and AI experts across the world.

By reviewing existing qualitative and exploratory secondary data points including government policy materials, the internet and documents from the governmental sources this paper argued that a successful application and use of AI in Nigeria still faces a number of challenges ranging from infrastructural deficiencies, unreliable internet accessibility, absence of electricity and exorbitant prices of computer system.

This paper therefore recommended that creation of awareness, bridging the existing skill gaps in Nigeria's tertiary education system, adequate funding, and training of AI teachers and data scientists', policy makers and the public is the positive path to follow to achieve the needed alignment between philosophy, AI, human needs and values.

Keywords: Artificial Intelligence, Philosophical World Views and Implications for Nigeria

INTRODUCTION

Neural networks or what is called generative artificial intelligence, AI are generally designed to independently operate and also make decisions that usually carries important outcomes as the outlook and views of the makers could eminently influence what is believed to be a morally acceptable decision making. This point deeply illuminate the necessity of embedding a variety

of perspectives to guarantee that computational intelligence operates in manners that are socially acceptable and just across social and cultural context.

Ajadi, S. (2020), argued that “while a utilitarian view may evaluate the positive contribution of AI purely in terms of its giving the greatest benefit to the greatest number of people, deontologist philosopher might rather concentrate on the intrinsic wrongness or rightness contribution of AI’s activities, without regard for the outcomes of such activities. Therefore, understanding the variety of perspectives on AI is vital for enlightened public discourse about neural networks, their guiding laws and ensuring social agreement on the path and direction of computation intelligence development in general”.

Ajay, V. (2018), observed that “knowledge engineering or AI are computer programmed roots manipulated electronically and use across different facets of human life for mankind’s comfort and development. As examples in Uganda, AI has helped offered pro-bono legal knowledge and services to citizens in rural community that could not otherwise access legal justice even as students utilizing AI powered customized learning tools were reported to have scored higher marks in mathematics and Hindi especially in India.

Brey and Søraker, (2009), argued that “AI has continued to extend important benefits across various industries thus enhancing human productivity and driving technology and Innovation by assisting human beings automate time consuming assignments and allowing them to focus on creative but more complex activities. Across manufacturing industries robots assist assemble products lines with precision and at high speed thereby reducing production hours. Furthermore, AI’s capability to perform multi-tasking operations simultaneously without human interference which helps to eliminate bottlenecks thereby ensuring predictive productivity and achieving higher level of efficiency while meeting demands and attaining effective delivery services”.

“The positive impact of AI is so evident across security, education, e-commerce and manufacturing especially with its capability to analyze data sets, automotive and ensure real time decisions that are indispensable for business success globally, For example in Nigeria, AI tools could be applied to support medical treatment, recommendations, support diagnosis and also help free up medical personnel to improve care and spend more time with patients. Therefore for countries and regions facing scarcity of medical professionals AI is not just assisting, it is a lifesaver” Effoduh, (2020).

Flowers, (2019), however observed that “human beings are presently feeling some of the negative results of AI as knowledge machines today influences human decision making at various levels because AI in its current state is largely unfettered and unregulated such that organizations are free to evolve algorithms that could aid their profit margins, and their impact on the society”.

Gadzala, (2018), corroborated the above position by arguing that “while the introduction of large language model (LLMs) has improved the quality of communication between man and machine as (LLMs) are supportive tools that individuals could utilize for seeking emotional support and for brainstorming yet these appliances are bridging areas reserved for human empathy and touch despite remaining as tools and not replacement ”.

Objectives of the Paper

- The first objective of this paper is to explore some of the basic epistemic, ontological, theological and ethical questions and implications of neural network (AI) by human beings with a view of ensuring that AI's incursion into human consciousness aligns with human and societal values, needs and expectations.
- The second of objective is to show that there exists a symbiotic relationship between AI and human interaction especially as philosophy helps to showcase this relationship

as it uses the various theories of mind to help AI developers generate effective yet intuitive interfaces as well as espouse the ethical management of AI systems.

- Finally, this paper aims to illustrate that philosophers have a duty to examine the futuristic implications of AI including its associated existential challenges and this requires logical reasoning and critical thinking about how AI objectives should align with human expectations, needs and values.

Literature Review

Presently, Africa is witnessing a population boom that is characterized by young and cosmopolitan adults. Compared to Germany with a median age of 47.1, China at 37.7 and the US at 38.1, Africa's median age is 19.5 and this population of Africans is expected to rise to 225 million by year 2055.



AI Robot at work
Source: sorenkaplan.com

Grosz, (2018), “Africa will become home to about three largest cities in the world. Lagos is expected to accommodate about 88 million residents followed by Kinshasa, the Congolese capital with about 83 million inhabitants and Tanzanians Dar Es Salaam, having some 73 million indigents and meeting the expectation of the development in Africa would naturally requires radical, creative and innovative approaches to address socio, economic and the governance challenges. African countries will continue to encounter pressures to render

services to a fast growing urban areas while at the same time improve performance on obstacles including unstable political atmosphere, recalcitrant level of poverty and trans-boarder crimes”.

Kathryn, (2017), argued that “one of the vital tools reputed as a possible solution to the multifaceted and multilayered problems in many Africans States including Nigeria is artificial intelligence bracket AI as computer facilitated machines has continued to support good governance even as it are equally valuable tools that could support States capacity within certain contest”.

Larsson, et al. (2019), observed that the African positive usage of AI have attracted media exposure. For example “starts-ups” in Ghana and Nigeria are currently stemming the problem of doctor’s shortages and poor medical accessibility to rural people in Africa as doctors could collect data, expand medical treatment and improve administrative competencies to rural communities.

Microsoft, (2018), maintained that "the continent of Africa will be compared to face unusual problems with the incursion of negative AI as weak governmental structures, transitioning democratic rules and important religious and ethnic delineations are most likely to aggravate the effort to eliminate some of the negativity associated with the use of computer-based machines and tools as this peculiar challenges would need programmes and strategies that would include African scholars and researchers who could identify both the challenges and opportunities of AI for positive utility".

Methodology

This paper leveraged a critical, qualitative secondary approach to examine a variety of data points including government and non-governmental materials and the internet to argue that the fast development of AI is raising major ethical and philosophical questions about the nature of

intelligence, the interaction between machines and mankind and what this interface portend for humanity's future. This paper therefore recommended that the philosophies of neural networks called AI should place premium on accountability, transparency as guidelines for computational systems to align with societal aspirations and values as well as interrogate the philosophies of neural networks and their specific interactions with technology. For ensuring that computational appliances including robots and machines impact an improved existential feature for all.

Findings and Discussion

As an academic discipline, philosophy has increasingly continue to shape and determine how artificial intelligence machines and digitalized technologies reason, create, generate, innovate and predict outcomes.

The philosophical concern and challenge is whether or not national leaders possesses the level of self-awareness and mental rigour to utilize philosophical enterprise and ideas as catalytic resources for creating value with AI or engage by default, unarticulated philosophical models for their AI development.

Although, while responsible AI and ethics currently predominates philosophical role in the development and deployment of AI answer, these moral the matics merely represents a small degree of the various philosophical worldview for guiding and informing AI's production, use and utility. Placing premium on ethical guidelines alone undervalues the true philosophical influence and impact on AI's.

Philosophical worldviews on what AI machines ought to achieve which falls within (theology) what counts or represents knowledge (epistemology), and how AI reflects reality (ontology) all help in determining value creation of machines of value.

Put differently, in the absence of logical reasoning and enduring cultivation of philosophical insight, social, political and economic institutions are likely to fail in terms of competitive advantages and superior returns from their predictive and generative AI investments.

While the application of computational systems promises solutions that could solve Africa's socio-political and economic problems especially in areas such as education, agriculture, healthcare and good governance yet its growth and may also worsen the challenges of inequality biases and misuse theory needing strong moral frameworks for successful operations.

In addition, efficient development of AI in Nigeria and other developing countries across Africa demands a variety of interdisciplinary discourses where ethicists, policymakers, technologists and philosophers would continue to engage and promote cross fertilization of ideas that would make Africa and its people the epicentre of its discussions and also pro-offer credible solutions to existing human problems within the African context.

In Africa, the current scientific and technological ecosystem is purely exclusionary in nature especially as a large percentage Africans do not have a mastery of English language while the available AI technology remains low especially in local languages that many Africans speak. AI can assist in bridging this language exclusion in contemporary Africa.

Conclusion and Recommendations

Neural network or computational knowledge popularly known as AI has the promise to significantly impact Nigeria by creating opportunities for improved education, economic growth, qualitative healthcare and enhanced efficiency across different sectors. However, it remains vital to implement its usage ethically and responsibly.

Some of the benefits of AI's impact on countries like Nigeria would include the fact that investment in computational knowledge would improve the infrastructural foundation of digital

technology including computing power and reliable internet access to enhance AI adoption and development.

Secondly, AI adoption in Nigeria would also promote the diversification of the national economy especially in areas such as renewable energy, manufacturing and agriculture amongst others.

Thirdly, the incursion of AI in Nigeria would also improve and encourage business operators to adopt AI appliances and technologies with a view of improving efficiency, reducing costs and promoting productivity.

Finally, the establishment of a viable and reliable collaboration between industry players, government and educational institutions should be encouraged to generate funding, expertise in AI education initiatives and resources. This initiative would promote a long term sustainable adoption, integration and enduring AI culture in Nigeria.

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