

ARTIFICIAL INTELLIGENCE ON MOVE: HOW ITS IMPROVING HUMAN WORLD – A REVIEW

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ABSTRACT

AI is found everywhere. A key role of AI is to enable computers to perform tasks such as decision making, problem solving, perception, understanding human communication (in any language, and translating between them). It gives us a detailed idea of how AI is used in a variety of ways and how it benefits mankind. This paper provides an overview of how Artificial Intelligence (AI) technology is used in almost every part of sector. Examining this paper can be helpful for everyone and especially for those who think AI is dangerous to the human race. Major engineers and developers have embraced the future solutions for working with people using this AI technology in a variety of fields. Therefore, for this reason there are many existing programs summarized and presented in this paper.

Keywords: AI, agriculture, automotive, iot, medicine, machine learning, in-depth learning, natural language processing

I. INTRODUCTION

"AI will be the best or worst of humanity" (Elon Musk). So, what is AI and how does it work? The ingenuity displayed by machines is in stark contrast with the natural instincts of man. Intelligence is provided by feeding on past and recent human experience on the machine in the form of data. I can see with the help of computer vision and deep reading (Eye - Camera). It can analyze and learn using machine learning algorithms (Sensors). It can speak and use natural language processing (Ear & Mouth - Mic & Speaker). Automatically repeat repetitive and detailed readings, adds intelligence, analyzes large and deep data, achieves incredible accuracy above and last but not least but reduces manpower. Over the years the public has seen significant improvements in the field of automated / independent data analysis, informatics. "The purpose of this paper is to summarize new approaches that can help people in many ways."

II. LITERATURE SURVEY

AI IN AGRICULTURE SECTOR: In agriculture there is a rapid acquisition of AI in its various farming techniques. The concept of computer computing is one that mimics the process of human thinking as a computer model. This results in vibrant agricultural technologies powered by AI, offering its services in translation, acquisition and response in a variety of contexts (according to the lessons learned) to improve efficiency. In order to reap the benefits of the sector by participating in the latest developments in the agricultural sector, farmers can be provided with solutions through platforms such as chatterbot. (V. Dharmaraj noC. Vijayanand, 2018).

It is the backbone of a sustainable economy. It plays an important role in long-term economic growth and structural transformation; however, it may vary from country to country. In the past, agricultural activities were limited to the production of food and crops. But over the past two decades, it has evolved into the processing, production, marketing and distribution of crops and livestock products. Currently, agricultural activities serve as a basic source of livelihood, improve GDP, be a source of national trade, reduce unemployment, supply raw materials for manufacturing in other industries, and develop the global economy. With the growing population around the world, it is necessary to revise agricultural practices in order to create new ways to sustain and improve agricultural practices. The introduction of AI in agriculture will be empowered by other technological advances, including big data analytics, robotics, internet of things, the availability of cheap sensors. AI is used to analyse the weather and weather forecasts to give an idea of plants depending on the plants in the field. Reducing crop damage due to natural disaster. AI application to monitor 24x7 plants to detect diseases using image processing and distribution of a suitable pesticide. (Accident Clara Eli Chukwu, 2019)

AI IN MEDICAL SECTOR: The medical knowledge available exceeds the planning power of the human mind, but medical education is always based on acquisition and application. Complicating this problem of overcrowding among students is the fact that physician skills sets should now include interoperability and management of intelligent applications (AI) that integrate big data, make diagnostic and therapeutic recommendations, and provide confidence levels in those recommendations. A machine that analyses the symptoms and causes of disease and proposes the drug needed to be tolerated. That information is provided in tons of medical information, depending on the applicants. This app uses medical images to distinguish healthy and sick patients. It is also used by people with disabilities to develop the skills needed by more and more physicians who are increasingly involved in collaborating and managing intelligent (AI) applications that cover large amounts of data, make diagnostic and therapeutic recommendations, and provide confidence levels. The ability to interpret possible possibilities that require statistical research in stochastic processes, something that deals with inadequate medical curricula, relies on AI to predict which treatments will work for a particular disease in a particular group of patients. The long-term approach is based on the choice of a “normal patient” treatment or treatment for most people who are no longer bad enough to meet the standards of customized medicine. As a result, the treatment of patients with different physical, cultural, and genetic characteristics will differ from custom-made drugs. As more experienced physicians use AI to support clinical decisions, they will need to be more skilled at defining treatment options for their patients. Just extending the current curriculum to address this shortage will not be enough.

As we have said before, the increase in misconduct between planning and maintaining a person’s mental capacity and the growing complexity of medications should force a significant revitalization of medical studies. Lessons should go from a focus on information acquisition to a focus on information management and communication. Nothing illustrates this need for change better than seeing that every patient becomes a major data challenge. For physicians, the need for possible understanding as a measure of confidence in the diagnostic or therapeutic recommendations produced by the AI clinical decision support system may grow as self-medication continues to increase its role in functioning. The ability to interpret these opportunities openly and empathetically for patients and their families represents an additional and important need for education that addresses the basic human, clinical, and ethical needs that no amount of computer power can meet. (Steven A. Wartman, MD, PhD and C. Donald Combs, PhD, 2019)

AI IN VEHICLE SECTOR: With the advent of private vehicles the public will need to face new risks, for the first time, involving the power of integrated community-based artificial intelligence to make complex risk reduction decisions: decisions that will ultimately have tangible consequences for life and death. Since AI decision is inherently different from human decision-making processes, questions arise about how AI evaluates decisions, how we will resolve these decisions, and what those decisions mean in relation to others. Therefore, society, policy, and end users, need to fully understand those differences. While AI decisions can be made according to specific definitions, the biggest challenges remain with the AI decision technology, the consideration of AI decisions, and the extent to which different players understand them. This is even worse in terms of analysing the benefits and risks of AI decisions.

Autonomous vehicles (AV) offer the opportunity to take advantage of the latest sensory technology and artificial intelligence (AI) to make driving decisions that reduce the many risks associated with human driving decisions. Indeed, the focus on AV driving AI reveals two conflicting approaches to the advantages and disadvantages of technology that create common confusion regarding machine decision-making problems and implications in terms of benefits and risks to society as a whole. The combination of sensory and intelligence technology provides a roadmap design that supports AI to make quick and accurate driving decisions. Like machines, the AV also eliminates decision-making problems associated with human weakness of fatigue, improper understanding, and drunkenness, as well as problematic decisions that people often make in driving situations. This provision of AV technology benefits creates a security issue that not only identifies the social benefits of machine decisions but also allows claims that AV should be based on policy. Private vehicles offer many social benefits: from improving the mobility of the poor, transforming urban areas and supporting the environment, greatly improving safety and saving lives. (M Cunneen, M Mullins, F Murphy, 2019)

AI IN SOCIAL MEDIA AND MARKETING: The increasing use of Artificial Intelligence (AI) in Social Media Marketing (SMM) has led to the need for this study to identify and continue to analyse the expectations of potential users of software based on AI for Social Media Marketing; software that will be developed in the next two years, based on its future technology Artificial Intelligence (AI) technology works very well in monitoring social media (Sterne, 2017) to get a complete picture of what social media contacts discuss product in their posts and comments (emotional analysis). They are also useful in determining how to approach personalized content (audience analysis) and how shared images enable savvy marketers to see the logos of products or companies working on social media content (image analysis). AI tools provide effective support for social media advertisers in their work to increase audience, image and emotional analysis by identifying branded content that engages high customer engagement with social media (Ashley and Tuten, 2015). Machine learning (ML), based on algorithms that enable special AI software to identify patterns within big data and categorize it, is entirely adapted to in-depth analysis of social media content (Cambria et al., 2012).

AI IN SEARCH ENGINE: Installation ingenuity is used in Search Engine Optimization (SEO) operations. Artificial intelligence is divided into three ways: evolutionary calculations, abstract concepts, and mathematicians and mathematical models. According to this section, the author is looking for scientific articles explaining the types of use of artificial intelligence in SEO books. The result found many variants such as Polidoxa, Fuzzy Inference System, commercial packages (SPSS Clementine and SearchDex Hyperloop), Support Vector Machine application, and the use of the K-Nearest Neighbor Algorithm. Search queries are blocked by the privacy of the algorithm used by SEO companies and by the search engines themselves. (Yodhi Yuniarthe, 2017)

The competition that will appear on the first page of search engine results (SEERP) is increasing and as a result, driving traffic to websites has become more difficult. Usually, Internet users visit the first links on the result page. To determine which Web pages, which are displayed at the top of a result page, search engines (SE) usually check their usability using the indexation process. In contrast, Website owners use Search Engine Optimization (SEO) techniques to increase Web content in a way that appears to be high on the results page which leads to increased website traffic and revenue. Several tools and techniques are used to enhance the visibility of the Website at the search level. (S Krrabaj, F Baxhaku, D Sadrijaj, 2017)

AI IN VOICE ASSISTANT: More than 100,000 people say "hello" to Alexa every day, Alexa, in fact, is not human; is a voice-controlled assistant developed by Amazon. Real voice assistants and their connected devices are gaining popularity. Leader is an Amazon Echo device, with the help of Alexa, released in 2014. This means that access to information, entertainment, and content of any kind will continue to be provided and managed by the voice assistant. These assistants are designed to be permanent, always listening to their names, ready to meet the needs of the user. The more contact a user has, the more the assistant learns and becomes more personal. This presents many challenges for advertisers. Content access will be preferred by virtual assistants rather than user-selected from, for example, Internet search results. And users will only be exposed to what they ask for, want or need, rather than more ads containing content. (Valerie K. Jones, 2018)

III. CONCLUSION

This conducted analysis definitely answers the questions regarding how AI is being used for betterment of human world and it's changing our lives. And the proximity of AI being used everywhere was found to be the greatest achievement of humans. Further studies are needed to establish casual relation and develop other presentative measures.

IV. REFERENCES

- [1] Valerie K. Jones. (2018). Voice-Activated Change: Marketing in the Age of Artificial Intelligence and Virtual Assistants. International Journal of Brand Strategy.
- [2] Yodhi Yuniarthe. (2017). Application of Artificial Intelligence (AI) in Search Engine Optimization(SEO). International Conference on Soft Computing, Intelligent System and Information Technology (ICSIT).
- [3] Anja Bechmann and Geoffrey C Bowker. (2019). Unsupervised by any other name: Hidden layers of knowledge production in artificial intelligence on social media. Big Data & Society

- [4] Alexandru Capatinaa, Maher Kachourb, Jessica Lichyc, Adrian Micua, Angela-Eliza, Micud, Federica Codignola. (2020). Matching the future capabilities of an artificial intelligence-based software for social media marketing with potential users expectations. International Journal of Technological Forecasting & Social Change.
- [5] Harsha Jakkanahalli Vishnukumar, Björn Butting, Christian Müller, Eric Sax. (2017). Machine learning and deep neural network — Artificial intelligence core for lab and real-world test and validation for ADAS and autonomous vehicles: AI for efficient and quality test and validation. Intelligent Systems Conference (IntelliSys)
- [6] M Cunneen, M Mullins, F Murphy. (2019). Autonomous Vehicles and Embedded Artificial Intelligence: The Challenges of Framing Machine Driving Decisions. Applied Artificial Intelligence an International Journal.
- [7] Steven A. Wartman, MD, PhD and C. Donald Combs, PhD. (2019). Reimagining Medical Education in the Age of AI. AMA Journal of Ethics.
- [8] A.Q. Ansari, Ranjit Biswas, Swati Aggarwal. (2011). Proposal for Applicability of Neutrosophic Set Theory in Medical AI. International Journal of Computer Applications.
- [9] B Chandrasekaran. (1983). On evaluating artificial intelligence systems for medical diagnosis. AI magazine.
- [10] V. Dharmaraj and C. Vijayanand. (2018). Artificial Intelligence (AI) in Agriculture. International Journal of Current Microbiology and Applied Science
- [11] Ngozi Clara Eli-Chukwu. (2019). Applications of Artificial Intelligence in Agriculture: A Review. International journal of Engineering, Technology & Applied Science Research.
- [12] S Krrabaj, F Baxhaku, D Sadrijaj. (2017). Investigating search engine optimization techniques for effective ranking: A case study of an educational site. 6th Mediterranean Conference on Embedded Computing (MECO).
- [13] <https://isidl.com/future+capabilities+artificial+intelligence+software+social+media+marketing> (INTERNET)
- [14] https://journalofethics.ama-assn.org/sites/journalofethics.ama-assn.org/files/2019-01/medu1902_1.pdf (INTERNET)
- [15] <https://core.ac.uk/download/pdf/200994983.pdf> (INTERNET)
- [16] <https://ieeexplore.ieee.org/abstract/document/7977137> (INTERNET)
- [17] <https://www.psqh.com/analysis/what-is-the-role-of-ai-in-medicine/> (INTERNET)
- [18] <https://www.mdpi.com/1424-8220/19/11/2526/htm> (INTERNET)
- [19] <https://www.sciencedirect.com/science/article/pii/S0040162519310613> (INTERNET)
- [20] <https://www.tandfonline.com/doi/full/10.1080/08839514.2019.160030> (INTERNET)
- [21] https://www.researchgate.net/publication/335582861_Artificial_Intelligence_in_Agriculture_An_Emerging_Era_of_Research
- [22] <https://ieeexplore.ieee.org/abstract/document/7977137> (INTERNET)