

Artificial Intelligence - Will It Be a Boon or a Curse?

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ABSTRACT

Today computers can reproduce human level intelligence, that's the level of change Science and technology has reached. One of the most widely anticipated scientific developments of our time, artificial intelligence or "super intelligence" has taken the world by storm. But renowned scientist like Stephen Hawking has also cautioned that whether artificial intelligence will be our greatest benefit or our biggest downfall remains a question. And as AI development is speeding up, more robots or autonomous systems are being born and replacing the human labor. This is the present circumstance; though, in the long haul, results appear to get all the more fascinating. Throughout, I will cover the major domains where human life is significantly affected by AI in both positive and negative ways.

KEYWORDS: *Artificial Intelligence, Privacy, Employment, Singularity, etc.*

1. INTRODUCTION

Firstly, we will understand, "What Artificial Intelligence (AI) is?" - In simplest terms, AI is the ability of a computer program, or a machine to think, learn and act like humans. Sometimes it is basic and other times it can be more specific set of actions or commands. AI or "Thinking Machines" has been important to researchers since the mid twentieth century, when the original PCs were structured. Mimicking nature is one of the strategies utilized by man for taking care of issues. Nothing can beat the human mind in regards to critical thinking.

Despite the way that we are relying on Artificial Intelligence as the next instrument to revolutionize the manner in which we live, work and connect with one another - which will be for the most part empowered by AI methods – it still stays vague about how these insightful specialists will take care of more mind boggling issues than the ones existing today (for example Poverty, Epidemics, atmosphere changes) while remembering that the best in class in AI today is to insightfully perceive pictures and sagaciously playing games.

Eventually, as it improves, then it will be no less than a superhuman intelligence and the inquiry emerging is that on the off chance that we don't have a legitimate structure to avoid malicious utilization of this knowledge, at that point it may put the whole humankind nearly on the verge of annihilation as well.

In case, we also look at the present condition and who is involved in with riding the surges of progression in Artificial Intelligence, by then one can without a doubt find gigantic undertakings like Google, Facebook, Microsoft, and IBM are the ones who are immense players in the field.

The advancement in AI is likewise bringing enduring results for example destroying occupations by the methods for work automation, one such situation can be found in the Industry 4.0 system, which is these days being used in the vehicle business. Industry 4.0 makes what has been termed as a 'smart factory' wherein a considerable number of robots take forward the whole manufacturing procedure with the help of computerized physical structures, IoT and cloud computing.

Nonetheless, if sooner rather than later, machines accomplish superhuman insight (which Vernor Vinge, the creator of 'The Coming Technological Singularity', called as Technological Singularity), at that point numerous moral inquiries will emerge. For instance: who will possess the robots (AI)? For what reason would robots dependably settle on moral choices? Is mankind under danger from hyper-smart machines? Would that be the beginning of a post-human era?

2. PAST AND PRESENT STATE OF AI

Artificial Intelligence isn't new; it was first initiated by the American specialist John McCarthy in 1955, who is furthermore seen as individual promoter of the field Artificial Intelligence [7]. The term 'Robot' was first initiated by Karel Capek in his play R.U.R (Rossum's Universal Robots) in 1921 [1]. So investigation in the field of AI has been done since decades, but the conditions were not reasonable for AI to flourish. Nowadays, we have cloud computing to store torrents of data remotely and unassuming neural framework advancement which is earnest in acknowledging, which was super costly back then.

Looking at the present domain of AI, we can say that the pace of headway of artificial intelligence is quickening. NIPS (Neural Information Processing Network) meeting is one of the famous one, among the most notable get-togethers in the field of Machine Learning and computational neuroscience. It is this gathering wherein 2013; Facebook CEO, Mark Zuckerberg announced to form an AI laboratory, and a start-up called DeepMind that demonstrated an AI which could easily learn to play computer-based game. Sometime later, DeepMind was acquired by Google.

Given the truth, conditions for AI nowadays are right, greatest associations in tech-industry for instance Google, Facebook, Microsoft and IBM have hopped into AI research, where they see a huge potential.

Also Currently AI has already taken its place in most of the industries, majorly automobiles, machinery, processes in factories, boilers, and heat treating ovens, switching on telephone networks, steering, and stabilization of ships, aircraft and other applications and vehicles with minimal or reduced human intervention, with some processes that have been completely automated.

As far as the mobile industry is concerned we understand that the AI in the form of Siri, Google assistant has become an indispensable part of our lives. They have helped us to get easy access to our application without actually giving manual commands over the phone. But while doing this we give AI access to the most sensitive information such as contacts, pictures, texting apps etc. which may turn out troublesome if someone get hold of that data.

3. THE FUTURE STEP IN ARTIFICIAL INTELLIGENCE

Using big data has persevered to develop and mature, with some businesses reaping sizable rewards. The processing of massive information has these days advanced to a brand new level of evolution, in the form of AI (artificial intelligence) systems. AI structures promise large effect (and disruptions) over the following decade. The use of AI to process huge datasets will convey previously unknown improvements to commercial enterprise intelligence and analytics amongst innumerable different technologies. Using an artificial intelligence to investigate huge data can offer a deeper expertise of both the outside and internal dynamics impacting a commercial enterprise.

To maximize the output offered by way of modern Artificial intelligence, there are 3 requirements. The primary is an analytical framework. Analytical frameworks are methodologies that have been evolved over time to resolve specific commercial enterprise issues (often complex). "The use of an analytical framework is essential in supporting the machine's artificial intelligence and machine studying abilities" Context is likewise a need. Artificial intelligence and gadget learning to know are currently very poor at figuring out context. AI can pick up on trends, and might decide what is taking place inside the statistics, but being capable of take it beyond fashion insights to creating a recommendation of what personnel must be doing, "context must be included.". Whilst its miles hoped that AI will be able to discover the ways to decide context, this is not yet a reality. Currently, context needs to be determined and introduced to the version by a human.

Appropriate technology is the 3 requirement. In contrast to traditional analytical systems, an AI-supported platform needs to be scalable for the AI to examine, and to create answers. A traditional analytical gadget could deliver insights at the statistics, at the same time an AI might offer suggestions in real time.

There are a variety of various strategies used in scaling databases upward to very massive sizes, while concurrently promoting ever-quicker charges of transaction each second. One tactic utilized by the majority of database control systems is the partitioning of data-heavy tables. This tactic allows a database to scale out across clusters of separate database servers. Moreover, multi-center cpus, huge smp multiprocessors, and 64-bit microprocessors can now guide multi-threaded implementations that can provide a massive scaling up of transaction processing capacities.

4. THE EVOLUTION OF AI WITHIN MARKETING

8 in 10 B2B advertising and marketing executives take into account that by 2020, ai will absolutely revolutionize advertising. The principle outcomes it will make to work practices may be more efficient in operations as machine learning to know implementation can deal with many admin roles, healthcare, finance and many greater.

4.1 Personalization With Phrasee

One challenging role in digital advertising is developing situation lines that compel your readers just to click on your email. A live, human employee will know the bits and bobs of your customer base, your ordinary reader, demographics, what worked or what didn't – therefore, they may be capable of creating more customized topics developing a better value to the content material. Now AI-powered software program like phrasee exists to help you optimize content material, and usually improve those open charges and ctrs.

4.2 A Smarter Future

It has been stated that we are at the cusp of the fourth Industrial revolution—a revolution that is absolutely special than the previous three. From steam and water power, electricity and assembly lines, and computerization to now challenging the ideas approximately what it relates to be human.

According to Forbes, the fourth Industrial revolution “describes the exponential changes to the manner we live, work and relate to each other because of the adoption of cyber-physical systems, Internet of Things and the internet of Systems.”

Smarter technologies in our factories and workplaces and related machines to be able to have interaction, visualize the complete production chain and make decisions autonomously is simply more than one of the methods that the industrial revolution will cause improvements in commercial enterprise. One of the finest guarantees that the fourth commercial revolution brings is the ability to improve the best of lifestyles for the world's population and raise income levels.

5. ENVISIONING AI IN THE NEXT 20 YEARS

5.1 2020–2025

- Between 70% and 90% of all preliminary client interactions are probable to be carried out or managed by way of AI
- Product development in a number sectors from style gadgets and customer goods to production system could increasingly be undertaken and examined via AI
- People could be able to define and design the personalised products and services they require in sectors starting from travel via to banking, financial savings, and coverage
- The technology is in all likelihood to be deployed throughout all government groups and legal structures—with the most complex cases requiring a human judge and complete court lawsuits
- Autonomous vehicles will start appearing in many cities across the world

5.2 2026–2035

- Globally authorized, smart crypto tokens may be widespread alongside fiat currencies as we part in the direction of a single global medium of trade
- The evolution of AI can also may see the emergence of a large range of absolutely automated dao businesses which includes banks, travel agents, and insurance companies.
- Scientific breakthroughs may enable us to create artificial animals and atmosphere intelligence
- There may be an inexpensive possibility of achieving Artificial General Intelligence.
- There's a small possibility of making Artificial Super Intelligence
- The singularity remains an unlikely possibility in this time frame.

6. PROS AND CONS OF ARTIFICIAL INTELLIGENCE

6.1 Pros

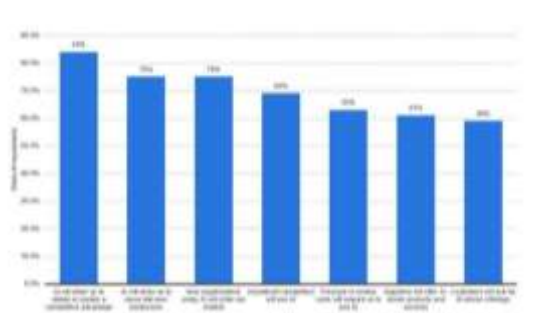
- Artificial intelligence is developing with every passing day. New technologies are being invented every other day as a result of advancement of science, which is leading to simpler lives.
- AI can be used for higher security purposes of confidential belongings. Features like face recognition and voice recognition are used which requires artificial intelligence of computer machines.
- The recent launch of digital assistants like the Google assistant or Siri or Cortana by the highly advanced organizations has taken a role of a new member in every family. With the use of features of AI like logical reasoning, perception of human behavior, massive statistical records, planning, machine learning, these avatars or the assistants can do wonders.
- Doctors and specialists rely a lot on the AI for proper treatments. Be it radio surgery, or neurological disorder, or depression, artificial intelligence is required in several fields for medical assistances.
- The field of robotics is very closely related to AI, which are logically trained and understands human behavior and psychology well and can be used in multiple fields like industrial laborious work, or engineering of machines minutely, or in operation theaters. Artificial intelligence is bedded into robots so deep, that robots are beating humans in intelligence games or competitions.
- Also, a lot of video games use the AI as games require human interaction and intelligence the most.

6.2 Cons

- The real risk of artificial thinking is the dread of human race eradication. Extraordinary identities like Stephen Hawking, Elon Musk and Bill Gates had demonstrated their worries about the negative impacts of artificial intelligence and the dread that AI may go outside the ability to control, of humans.
- There was an incident that took place in Facebook, where they had to close down one of there AI frameworks when, bots began interacting among themselves in their own language.
- As AI can be utilized for improvement of mankind, it can likewise, be an reason behind human debasement. Computerized destructive machines and weapons can be developed that uses AI and these weapons can prompt mass devastation, if, it falls into wrong hands.
- Artificial intelligence theoretically implies a more smart machine than individuals. An excess of intelligence machines may prompt loss of humankind, since people would begin to depend on those machines excessively and would inevitably lose their own judgmental, considering or sentimental qualities.
- Bringing machines with artificial intelligence would mean a decrease in human work, which thus prompts joblessness. AI machines would mean better work performances, however it would likewise prompt an economic instability.

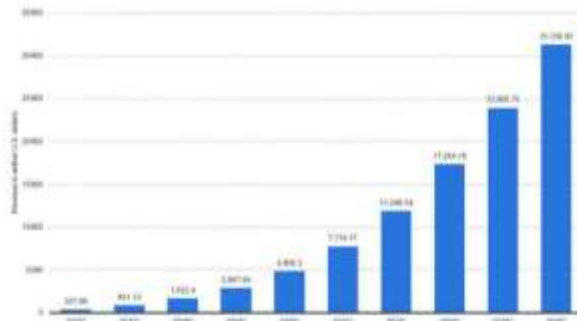
7. FIGURES

- 84% of endeavors think putting resources into AI will prompt more prominent upper hands. 75% trust that AI will open up new organizations while likewise giving contenders better approaches to access their business sectors. 63% trust the strain to diminish costs will require the utilization of AI.

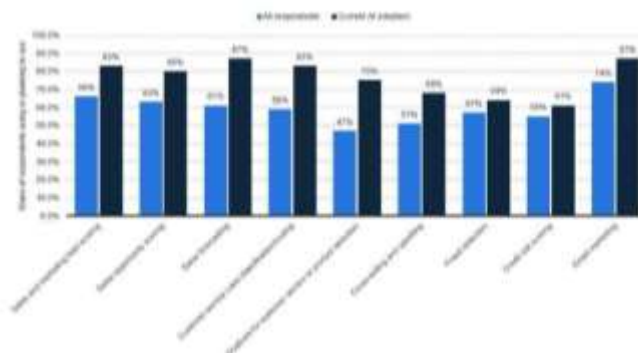


- Worldwide revenue from AI for enterprise applications is anticipated to develop from \$1.62B in 2018 to \$31.2B in 2025 accomplishing a 52.59% Compound Annual Growth Rate (CAGR) in the figure time frames.

- Picture recognition and labeling, patient information processing, localization and mapping, prescient upkeep, utilization of algorithms and AI to foresee and foil security dangers, intelligent recruitment, and HR frameworks are a couple of the numerous endeavor application use cases anticipated to fuel the anticipated fast development of AI in the venture.



- 87% of current AI adopters said they were utilizing or considering utilizing AI for deals determining and for improving email promoting. 61% of all respondents said that they at present utilized or wanted to utilize AI for deals gauging.



8. CONCLUSION

There's definitely no doubt that AI has the potential to largely improve our lives. AI will make the roads safer, help in medicine, aide the disabled and the elderly, work customer service and a number of countless other jobs. At the same time, it also poses an incredible threat to humankind, as believed by top scientists and technologists like Stephen Hawking, Bill Gates and Elon Musk. Hence the ethics of artificial intelligence has to be formulated well and applied on the machines at all costs.

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