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Artificial Intelligence : A Boon or A Bane To Humans

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ABSTRACT

The future world can be said the world of the machines that work as intelligently as to replicate the behavior of human mind. This intelligence can be considered as Artificial Intelligence. Researchers have developed an Artificial Nerve System that could give the prosthetic limbs or robots reflexes and the ability to sense. "Avatars"[1], the replica or digital assistants are used to interact with the user. Some of the Virtual Personal Assistant like Siri, Google Now, Google Assistant, Cortana etc. respond to the user request by recognizing the voice. In May 2018, Google revealed Duplex[2], an extension of the Google Assistant that allows it to carry out natural conversation by mimicking human voice and use the filter words such as 'hmm' and 'uh'. The AP Fox and Yahoo! all use Artificial Intelligence to briefly write simple topics like financial summaries, sports recaps and fantasy sports. Artificial Intelligence is also used in litigation as e-discovery, predictive coding, Natural Language Processing of legal documents (Automated Contract Analysis). Using the Artificial Intelligence 88000 retina images can be drawn in medical area. Chatbots are used for easy ordering via text, email or face recognition. Babel Fish is a fictitious alien fish that performs instant translations. Yahoo! Babel Fish is a web translation service is one of the best features of AI to translate the users' requests. It can not give the real time response and in the emergency situations it behaves angrily. Recently Apple suppliers Foxconn[3] replaces 60,000 workers with robots at China Factory. Sofia Robot seems to be the replica of Ex-Machina behaves like an adult with self-modification of the programs and a threat to the human life. US researchers recently unveiled Norman: also known as first psychopathic AI. Norman represents a case studyon the dangers of AI gone wrong when biased data is used in machine learning algorithms.

Keywords : Artificial Intelligence and Virtual Reality , AI growth , AI Robotics, popular examples of AI , proposed work on limitations of AI, future of AI in India

I. INTRODUCTION

Artificial Intelligence is like a sword that is having the pointed ends on the both sides. Besides being a friend it can be seen a terminator like situation in future. Google DeepMind shows the hostile situations of AI by experiments. Artificial Intelligence is complex in nature. It uses very complicated mixtures of computer science, Maths and other complex science. Complex programming helps the machines to replicate the cognitive abilities of the human beings. Many AI are capable of learning from data. Artificial Intelligence has great benefits over the natural intelligence as AI is consistent, less expensive, more permanent and can perform much faster and accurate than human. The accuracy and error detection is much higher in Artificial Intelligence. The Turning test[4] approach is to test the ability of a machine to

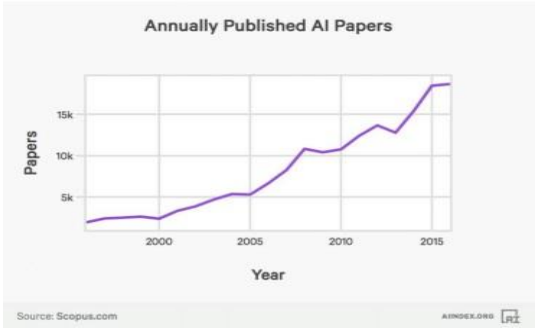
show the intelligent behavior either equivalent to that of human behavior. The test result depends on the resemblance of answer not to the correct answer.

II. Artificial Intelligence(AI) and Virtual Reality(VR)

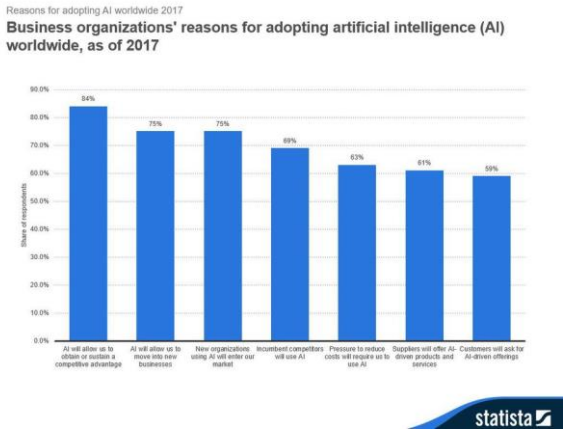
By modeling physics, motion and material interactions, virtual reality[5] is stabled to become a simulation tool for training automations – robots, drones and diagnostic gear-before they need to perform in the real world. That is one small step for robotics but it foretells a much bigger step forward for AI. Recent advancements with a combination of VR and AI leads to a future of safe and competent and intelligent machines able to learn through self-training and intelligent, realistic simulation. So Extended reality (a combination of AI & VR) reduced the risks and will be an important element of training, sales and marketing and also a key role to the firms for dealing with the new and coming risks.

III. AI Index insighting into AI Growth

The AI Index[6] is focused on tracking activity and progress on AI initiatives, and to facilitate informed conversations grounded with reliable, verifiable data. The number of Computer Science academic papers and studies has soared by more than 9X since 1996. There has been a 14X increase in the number of active AI startups since 2000.

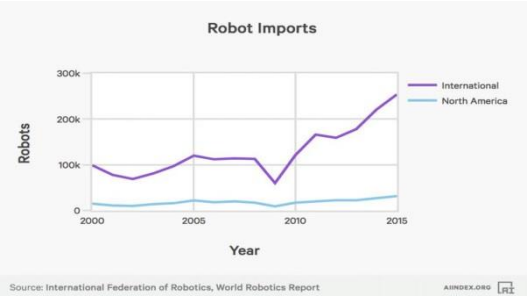


84% of enterprises believe investing in AI will lead to greater competitive advantages.87% of current AI adopters said they were using or considering using AI for sales forecasting and for improving e-mail marketing



IV. Artificial Intelligence Robotics

Robotics[7] is a branch of artificial intelligence composed of Electrical Engineering (power & electricity), Mechanical Engineering (forms or designs), and Computer Science(algorithms to work on) for designing, construction, and application of robots. 'HOME', 'PEPPER', 'C-3PO' are some of the robots that can be the friend for the aged persons for elder care. Robotics has a great deal in industries, medicines, military, exploration and entertainment. Internationally, robot imports have risen from around 100,000 in 2000 to around 250,000 in 2015



V. LATEST & FUTURE TRENDS IN AI

1. **An Artificial Nerve System gives prosthetic devices and robots a sense of touch.** Researchers have developed an Artificial Nerve System that could give prosthetic limbs[8] or robots reflexes and the ability to sense touch.
2. **Activity simulator could eventually teach robots tasks like making coffee or setting the table.** Computer scientists explained 'VirtualHome' , a

system that can simulate detailed household tasks and have AI agents execute them, opening a possibility for the same to be followed by the robots.

3. **Cometh the cyborg: improved integration of living muscles into robots.** Researchers have developed a novel method of growing whole muscles from hydrogel sheets impregnated with myoblasts . This approach overcame earlier limitations of a short functional life of the muscles and their ability to exert only a weak force paving the way for more advanced biohybrid robots.
4. **Autonomous glider can fly like an albatross, voyage like a sail boat.** Engineers have designed a robot glider that can skim along the water surface, riding the wind like an albatross while along surfing the waves like a sail boat.
5. **Scientist create Remote- Control Robotics through coral reefs and takes high-resolution photos.** According to them the remote-controlled robot swims quietly through the coral reefs and schools of fish and uses a fish-eye lenses to capture high resolution photos and videos with a camera built in to its nose such as dubbed SoFi.
6. **Robotic 'Super Monster Wolf'[9] deployed to protect Japan's crops from wild boars.** This robot stands at 50cm tall, 65cm long and runs on rechargeable solar batteries, using motion-sensors to detect the other mammals approach and letting out an alarming primal hawl in response.

VI. PROPOSED WORK TO THE LIMITATIONS OF AI

For the machines to work like a human being or to replicate the cognitive[10] behaviors of human like reasoning, problem solving and decision making, artificial intelligence need hundreds of thousands time more data than human beings. Problems include the need for the vast amount of data to power deep learning systems; our inability to create AI that is good at more than one task. The use of the supervised neural networks can solve the problem by using the previous data for the self-modification of the AI systems. Secondly AI leads to intelligence explosion which will optimize the world for accidently disastrous. A controlled intelligence explosion could optimize the world for good. Development of safe superhuman AI and differential intellectual progress over superhuman AI and risk increasing intellectual can win the race of humanity.

VII. FUTURE OF AI IN INDIA

Now not only private organizations are keen to the technology but government organizations like 'Niti Aayog'[12] are also looking forward to it. In fact the Indian Government has allocated Rs. 3.073 crore to spearhead work on fifth-generation start-up like AI , Machine Learning , 3-D printing etc.

VIII. CONCLUSION

Artificial Intelligence is having a wide scope of applications in each and every field. If AI has the potential to become more intelligent than any human then there is no way to predict the future holds especially if they end up outsmarting us. Development of safe superhuman AI and differential intellectual progress over superhuman AI and risk increasing intellectual can win the race of humanity. Artificial Intelligence has great benefits over the natural intelligence as AI is consistent, less expensive, more permanent and can perform much faster and accurate than human. The accuracy and error detection is much higher in Artificial Intelligence.

IX. REFERENCES

1. http://en.m.wikipedia.org/avtar
2. https://www.digitaltrends.com/
3. http://m.economictimes.com
4. Copeland, Jack (2003), Moor, James, "The Turing Test", The Turing Test: The Elusive Standard of Artificial Intelligence
5. https://appreal-vr.com/blog/virtual-reality-and-artificial-intelligence/
6. https://www.forbes.com/sites/louiscolumbus/2018/01/12/10-charts
7. https://www.tutorialspoint.com/artificial_intelligence/artificial_intelligence_robotics.htm
8. https://www.independent.co.uk/topic/artificial-intelligence
9. https://www.independent.co.uk LIFE Tech News
10. Russell, Stuart J.; Norvig, Peter (2003). Artificial Intelligence: A Modern Approach
11. https://inc42.com/buzz/niti-aayog-ai-roadmap/