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The Role of Artificial Intelligence on Emerging Technologies & Society

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Abstract: ***Artificial Intelligence (AI) is one of the current emerging technologies. In the history of computing AI has been in the similar role earlier - almost every decade since the 1950s, when the programming language Lisp was invented and used to implement self modifying applications. The second time that AI was described as one of the frontier technologies was in the 1970s, when Expert Systems (ES)were developed Currently in the 2010s, AI is again on the frontier in the form of (self-)learning systems manifesting in robot applications, smart hubs, intelligent data analytic s, etc.***

Artificial intelligence (AI) is an important technology that supports daily social life and economic activities. It contributes greatly to the sustainable growth of Indian's economy and solves various social problems. Artificial intelligence refers to the ability of a computer or a computer-enabled robotic system to process information and produce outcomes in a manner similar to the thought process of humans in learning, decision making and solving problems (Intelligence, 2017). By extension, the goal of AI systems is to develop systems capable of tacking complex problems in ways similar to human logic and reasoning.

Keywords: Artificial Intelligence, Learning, Deep learning, Lisp, Prolog, Expert Systems,Emerging technology, Frontier technology

I. INTRODUCTION

Artificial Intelligence (AI) is the science and engineering related to the computational understanding of intelligent systems, which can be used for artificial intelligence. Artificial intelligence. It comprises a wide range of tools, techniques, and algorithms, including neural networks, genetic algorithms, and algorithms,symbolic AI, and deep learning. These are the main areas. Growing rapidly and making significant impacts. Indiverse fields such as health care, space, robotics, and military.

Artificial Intelligence (AI) is the theory and development of computer systems able to perform tasks normally requiring human intelligence, such as visual perception, speech recognition, decision-making, and translation between languages. It is often connected to the features of a computer system that have elements of human behavior (modified definition by the authors). The overall research problem handled in this paper is "The Role of Artificial Intelligence on Emerging technologies & society"

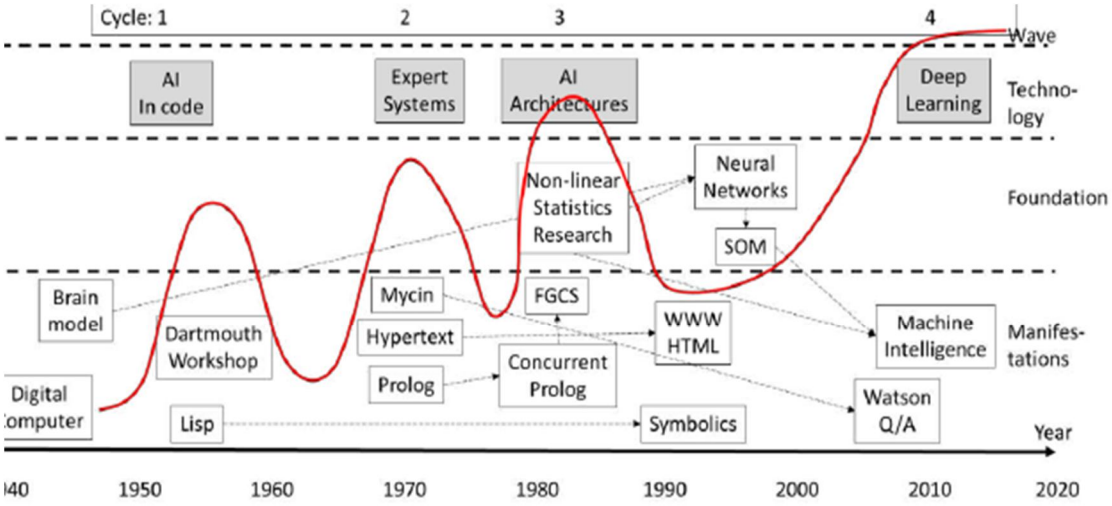

Figure 1. A short, simplified history of artificial intelligence focusing on the viewpoints of this paper.

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II. IMPACT OF ARTIFICIAL INTELLIGENCE ON HUMAN SOCIETY

Peoples need to be productive to create their living, but with the benefit of AI, ready to fair program the machine to do a thing for us without lifting an instrument. Human closeness will be steadily decreasing as AI will replace the require for individuals to meet confront to confront for thought trade. AI will stand in between individuals as the individual gathering will now not be required for communication.

A. Client Services

The conversational chatbot is one of the most widely used types of AI. To automate communication and offer a highly customised customer experience, these are messaging applications, speech-based assistants, or voice activated devices. These applications—often referred to as the Internet of Things or IoT—can immediately process enormous volumes of data, allowing them to respond more quickly and precisely than a human could ever.Marketing can utilise similar personalisation that maximises data usage. We receive emails that are pertinent to us and social media advertisements that just so happen to be something we are interested in from this source.Each consumer may even see a separate website homepage in some circumstances, depending on their expected preferences and areas of greatest interest. These applications of AI are excellent ways to ensure consumer loyalty by providing a tailored experience.

B. Fraud and data security

Artificial intelligence (AI) can be used to spot fraudulent activity and stop illegal access to data. Artificial intelligence is essential in the fast-expanding digital world for thwarting cyber attacks. For instance, strong algorithms can detect viruses and stop spam. When there is a possible threat, machine learning will alert organizations by identifying unusual patterns in the data.Additionally, we are noticing a rise in the use of identity verification methods other than passwords, like facial recognition and fingerprint technology. These distinctive IDs based on unstructured data are much harder to hack and provide an excellent layer of security for companies.

C. .Automating Business Processes

Many manual processes are common in organisations that have been around for a while. Given its effectiveness at managing mundane operations, enhancing interfaces, desire and speed to perform tedious jobs, and capacity to handle enormous volumes of data, AI is an ideal partner to improve these efforts. The use of robots in manufacturing facilities, controlling the environment in product storage, processing

payments, and logging client requests are some apparent activities, but they just scratch the surface of what is possible. When a doctor speaks clinical notes into an AI device, the documents are immediately filled up and a prescription is ordered. Lawyers will utilise AI to process contracts and agreements that could have taken themdays or weeks in a fraction of the time.

D. Staff Training

Businesses employ AI to build individualised training plans. Many businesses have extensive knowledge bases that might take employees weeks or even months to learn. By giving the student the content, they prefer, AI has been proven to reduce this by half. This may include the sequence in which the material is taught, the intervals in which repeat material is delivered, or the format of the material, such as written, visual, or audio. Training is more pleasant and beneficial.

The positive impact of AI reaches almost every dimension of human life. Starting from helping human beings in carrying out routine activities in everyday life, to the usefulness in the field of military, monetary, or health.With the undeniable capabilities offered by AI, it seems to provide a paradigm when almost all sides of human life can be fulfilled and replaced by robotic arms and intelligent systems implanted with artificial intelligence.For the medical field, the role of Artificial

For the medical field, the role of Artificial Intelligence is divided into two. The first role is virtual, and the second is physical. For virtual roles, this is intended as a system within a computer. Which in practice, AI branch of Machine Learning (or also called Deep Learning) is the identity. For machine learning alone, actually divided in to 3. The first is the ability of ML that does not require supervision (unsupervised), in this case the ability of machine learning is very advanced because it is able to recognize patterns that formed on an event and then learn it yourself. The next type of machine learning is ML that requires surveillance, which for this type of classification and prediction algorithm based on patterns that have been introduced previously. Then the last type of machine learning called reinforcement learning is the most powerful level.

In reinforcement learning, the machine will be required to 'think' for themselves what is best to do when finding an event. The machine will be asked to choose for themselves what action will best reward through the experiments of the action.

There is a large array of applications where AI is serving common people in their day to-day lives:

1) *Expert Systems:* Examples Flight-tracking systems, Clinical systems
2) *Natural Language Processing:* Examples Google Now feature, speech recognition, Automatic voice output
3) *Neural Networks:* Examples: Pattern recognition systems such as face recognition, character recognition, handwriting recognition
4) *Robotics:* Examples: Industrial robots for moving,spraying, painting, precision checking, drilling, cleaning, coating, carving etc.
5) *Fuzzy Logic:* Examples: Consumer electronics, automobiles, etc.

III. CONCLUSION

AI utilizes computers that can store large amounts of data. The initial goal of making AI is to facilitate human work ranging from computing, computing, modeling automated machinery, and others. As time went by, AI's development began to get out of hand. The rapid development of AI began to appear when the robot robot began to emerge that is shaped like a human. It has now developed a system that is biased and respond like a human brain. If this continues to be left, then over time humans will be replaced with robots or worse the revolution of the robot that will replace the role of human

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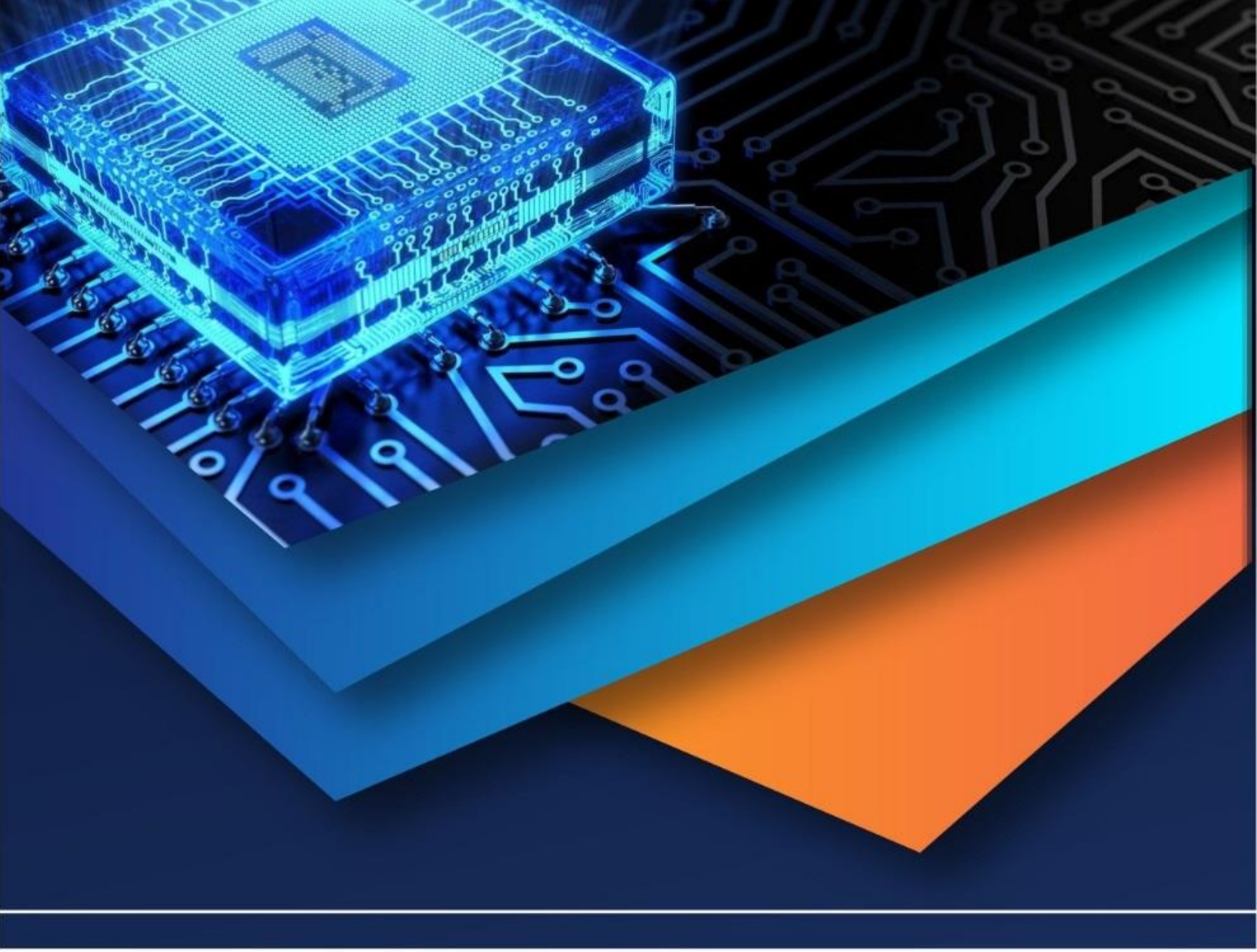

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