

## Editorial

# Artificial Intelligence :Future for Biological cell engineering

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Artificial Intelligence is one of the most sought after frontier areas of modern science. John McCarthy (1927 - 2011) was an American computer scientist who first coined the term Artificial intelligence in the year 1955. Research continues at various level for simulations of human brain systematic thinking in electronic devices and its translation. A concept of biology : “Intelligence” let be transform to electronic signals and waves and translated to work by machines called machine learning. It is an interdisciplinary science of electronics, physics, chemistry, mathematics, engineering, computer science and finally the biological sciences. There is every possibilities in coming days, the machine learning and artificial intelligence will replace existing machines and begin an new era of machine with memory, judgment and execution. Two pioneers of artificial intelligence — John Hopfield and Geoffrey Hinton — won the Nobel Prize in physics for helping create the building blocks of machine learning that is revolutionizing the way we work and live but also creates new threats for humanity. An artifitial neural network in electronics has been developed, interconnected computer nodes simulating the neural network in brain. **Few remarkable quotes are mentioned here on AI :** 1. Hinton, who is known as the godfather of artificial intelligence, Hopfield is an American working at Princeton. Hopfield, whose 1982 work laid the groundwork for Hinton’s,quoted by a member of Nobel Committee.

2. Hinton said “AI will end up having a “huge influence” on civilization, bringing improvements in productivity and health care. “It would be comparable with the Industrial Revolution,” “We have no experience of what it’s like to have things smarter than us. And it’s going to be wonderful in many respects,” “But we also have to worry about a number of possible bad consequences, particularly the threat of these things getting out of control.”

3. One of the Nobel Committee members quoted : AI has “enormous benefits, its rapid development has also raised concerns about our future. Collectively, humans carry the responsibility for using this new technology in a safe and ethical way for the greatest benefit of humankind.”

When intelligence is a word meaning related to the biological memory on the neural system, its application in machine could really be a challenging for the scientists. what so ever or its level of implications begin with from a minor phyla to higher organism. This concept of memory and analyzing capacity of neuronal system has been translated and incorporated in machine. It will be applied in robotics, health cares system, diseases diagnosis, finance, automated administrative task, defense, to improve public safety, detect crime, and provide citizen services, banking services and many others that will have deep societal implications. Successful use of AI planning and perception approaches may be seen in NASA’s space-based autonomous vehicles, which use technology to steer and move on their own without human intervention

The animal cell could be the most complex organized system of matter, that unable to synthesize in artificial condition. While, AI will bring the answer of many complex questions of biomedical diagnostic, treatement and surgical procedures, the functions of biological cells,its life span, and changed dunctions in different stages of organism’s life need to be elucidated. It is yet to be find out how, organism’s brain work, the neural network communicates for final delivery of mind.

Does artificial Intelligence replace the human brain ? Or it is not the objective of AI studies ? A network of systemaic reasoning ants its output the technology of AI and its applications. A work shall need to understand by reasoning

step by step and translated into electronic signaling wave and its final output in terms of work performance. Time will come, when AI will be part of daily life, begin with housekeeping to the critical health care services.

Few questions arise : Does a biological cell including a neuron can be synthesized in the laboratory. Does the AI chips or any other new devices of AI can be implanted in biological system for working out metabolic activities, neural functions? Does AI will be a replacement of inborn error of metabolic and neural disorder of Childens. War ravaged world is one of the major threats and challenges to be faced by the humanity in coming years. Whatever and wherever, it hold out, how far the implications will be of small nuclear arms. We are keeping our fingers crossed for the better days for humanity.

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