Futuristic Trends in Artificial Intelligence

Chapter2:

Artificial Intelligence (AI): How the Technology Transform the World from Human to Machine.

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Chapter2:

Artificial Intelligence (AI): How the Technology Transform the World from Human to Machine.

Emerging technologies like Machine Learning, Internet of Things, Robotics, Block Chain, Big data, Deep Learning, Edge Computing, Adaptive Security, VR/AR are driven by Artificial Intelligence for shaping the industrial future along with humanity.

Machine reacts like humans and works like human intelligence when we programmed machines/computers. Technology used for performing this type of task is Artificial Intelligence. Machine Learning and Deep Learning are the subset of Artificial Intelligence.

There are many applications area for this emerging technology.

E-Commerce

For Custom-made Shopping Experience Electronic Commerce widely used Machine Learning and Artificial Intelligence algorithms.

Healthcare

For diagnosing of many disease and identify the new drugs and vaccine by analyzing the data and medical intelligence. AI helps in healthcare industry for such a purpose.

Agriculture

AI in agriculture is used for soil quality detection. Based on quality of soil and nutrition available in soil farmer can grow a more crop.

Navigation and Travel

AI enabled algorithm used to scan information to identify the optimal route from source to destination.

Social Media

Social Media uses AI algorithm to identify visuals and give recommendations based on people interest.

Security and Surveillance

AI is useful in the domain of security and surveillance by intelligence video surveillance system. Intelligence system used for constantly monitor multiple channels.

Finance and Stock Market

For Best prediction of stock market and generate action reports based on relevant financial data by scanning millions of key points using AI Algorithms.
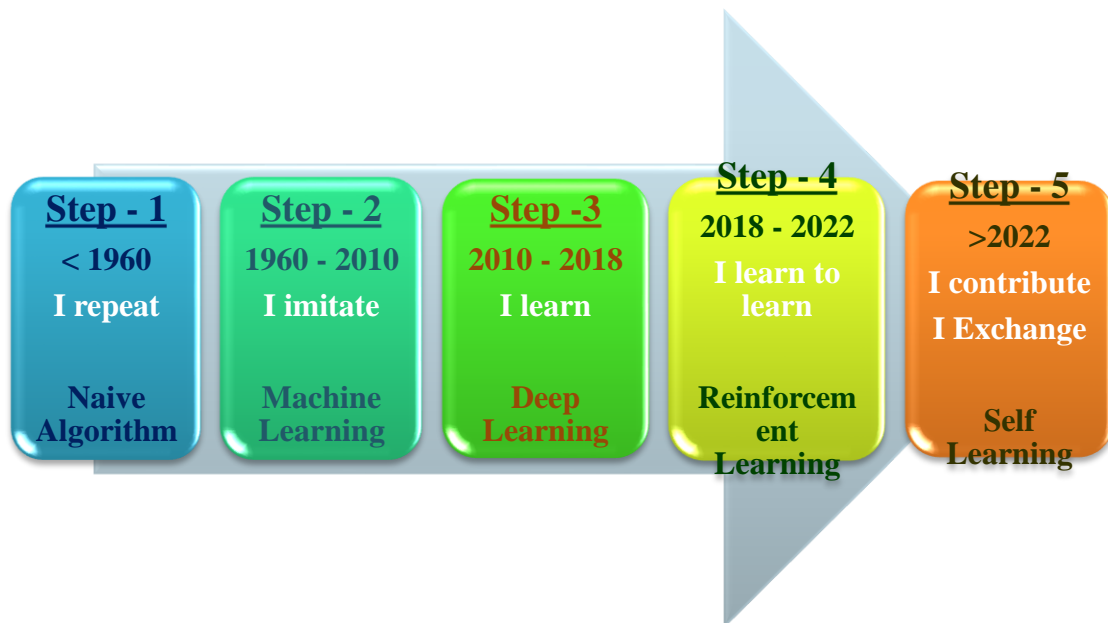
Artificial Intelligence: Past, Present and Future

Step - 1	Step - 2	Step -3	Step - 4	Step - 5
< 1960	1960 - 2010	2010 - 2018	2018 - 2022	>2022
I repeat	I imitate	I learn	I learn to learn	I contribute I Exchange
Naive Algorithm	Machine Learning	Deep Learning	Reinforcement Learning	Self Learning

Figure 1: Evolution of Artificial Intelligence

Artificial Intelligence: A boon of future industry

AI is the main tool behind new-age innovation and discoveries like driverless cars or disease detecting algorithm.

– Sundar Pichai (CEO – Google)

Generalized AI is worth thinking about because it stretches our imaginations and gets us to think about our core values and issues of choice.

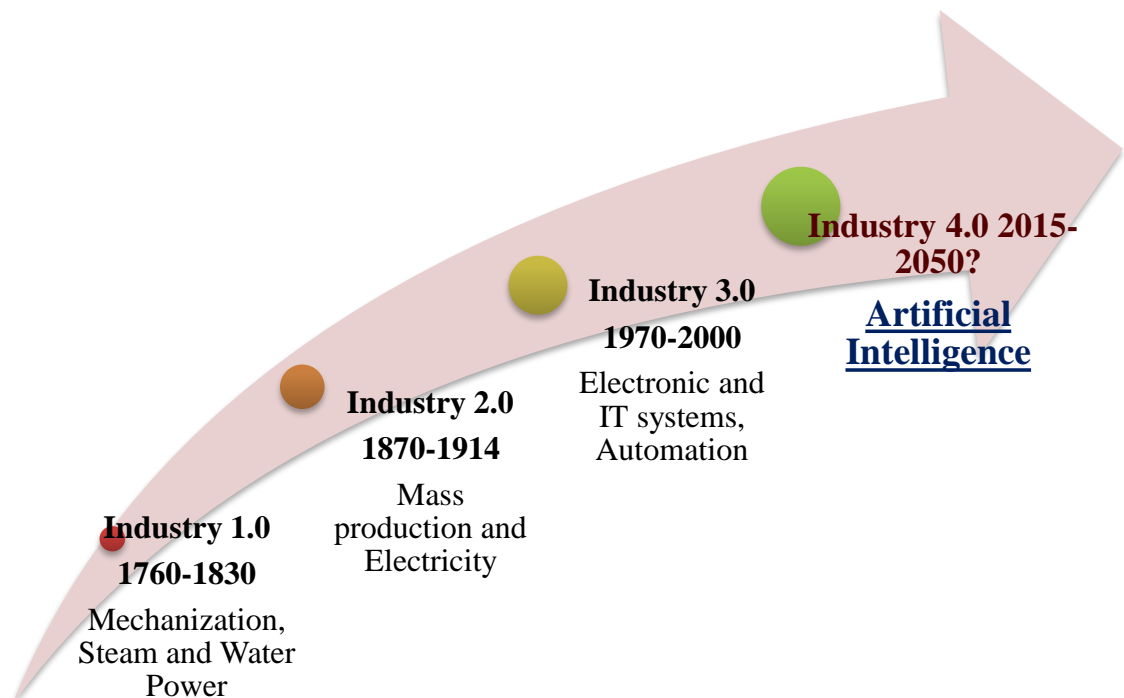– Barack Obama (Former President – USA)

Artificial Intelligence will be 'vastly smarter' than any human and would overtake us by 2025.

– Elon Musk (Founder & CEO –Tesla SpaceX)

We are now solving problems with machine learning and AI that were in the realm of science fiction for the last several decades.

– Jeff Bezos (Founder & CEO – Amazon)

Artificial Intelligence – A driving strength of Industry 4.0

Industry 4.0 2015-2050?
Artificial Intelligence

Industry 3.0
1970-2000
Electronic and IT systems, Automation

Industry 2.0
1870-1914
Mass production and Electricity

Industry 1.0
1760-1830
Mechanization, Steam and Water Power

Artificia **Figure 2**: Industrial Development

Computer Vision, Robotics, Expert System, Speech recognition, Video analytics, Natural Language Processing, Game playing and many more scope in the field of Artificial Intelligence.

$50.1 billion in 2020 to more than $110 billion in 2024, double spending on the AI is forecast by Global spending on it.

As per the prediction by industry that 48% of India Inc. believes future workplaces will witness a surge in demand for AI & ML experts by 2025. Talent in future will be the technology as mentioned below.
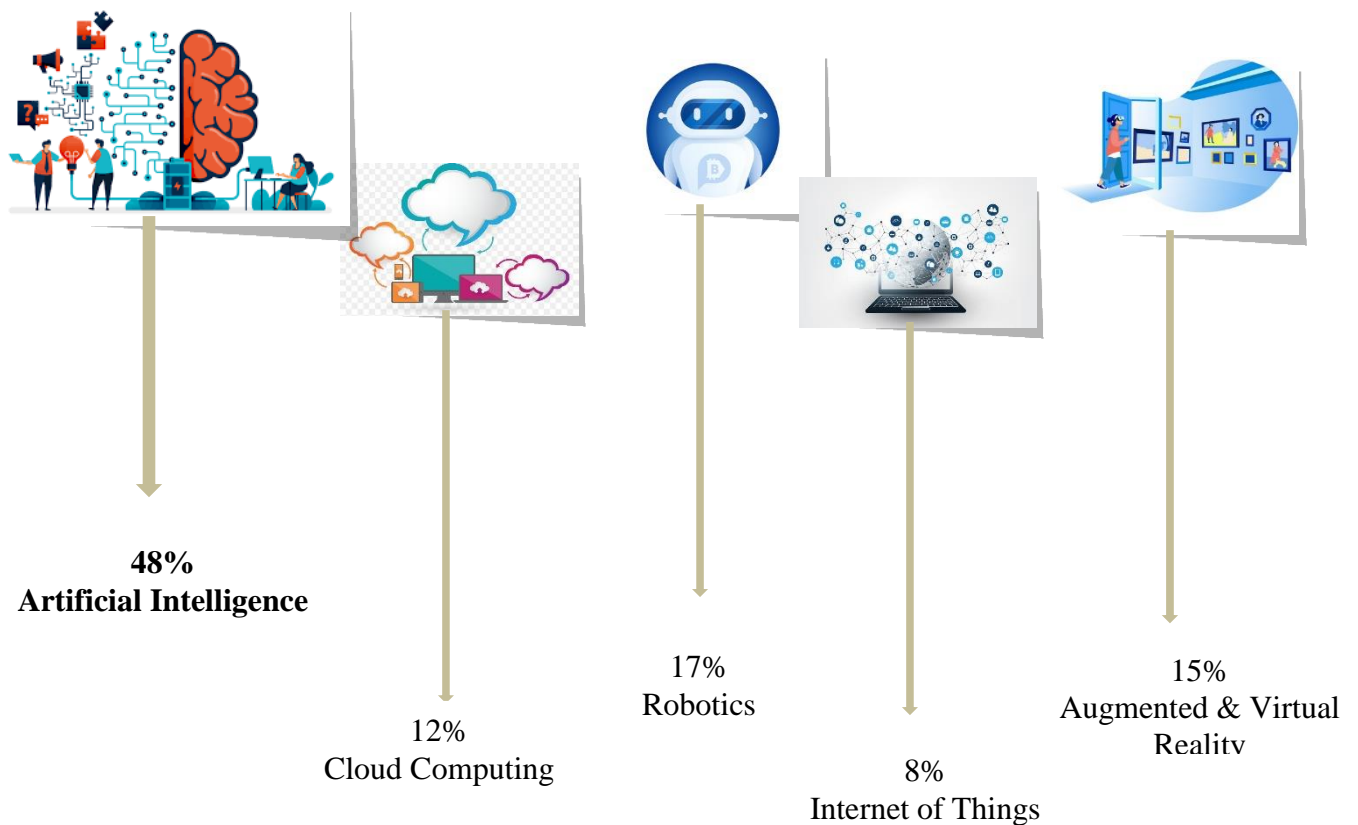
48%
Artificial Intelligence

12%
Cloud Computing

17%
Robotics

8%
Internet of Things

15%
Augmented & Virtual Reality

Figure 3: Highest demand for talent in future