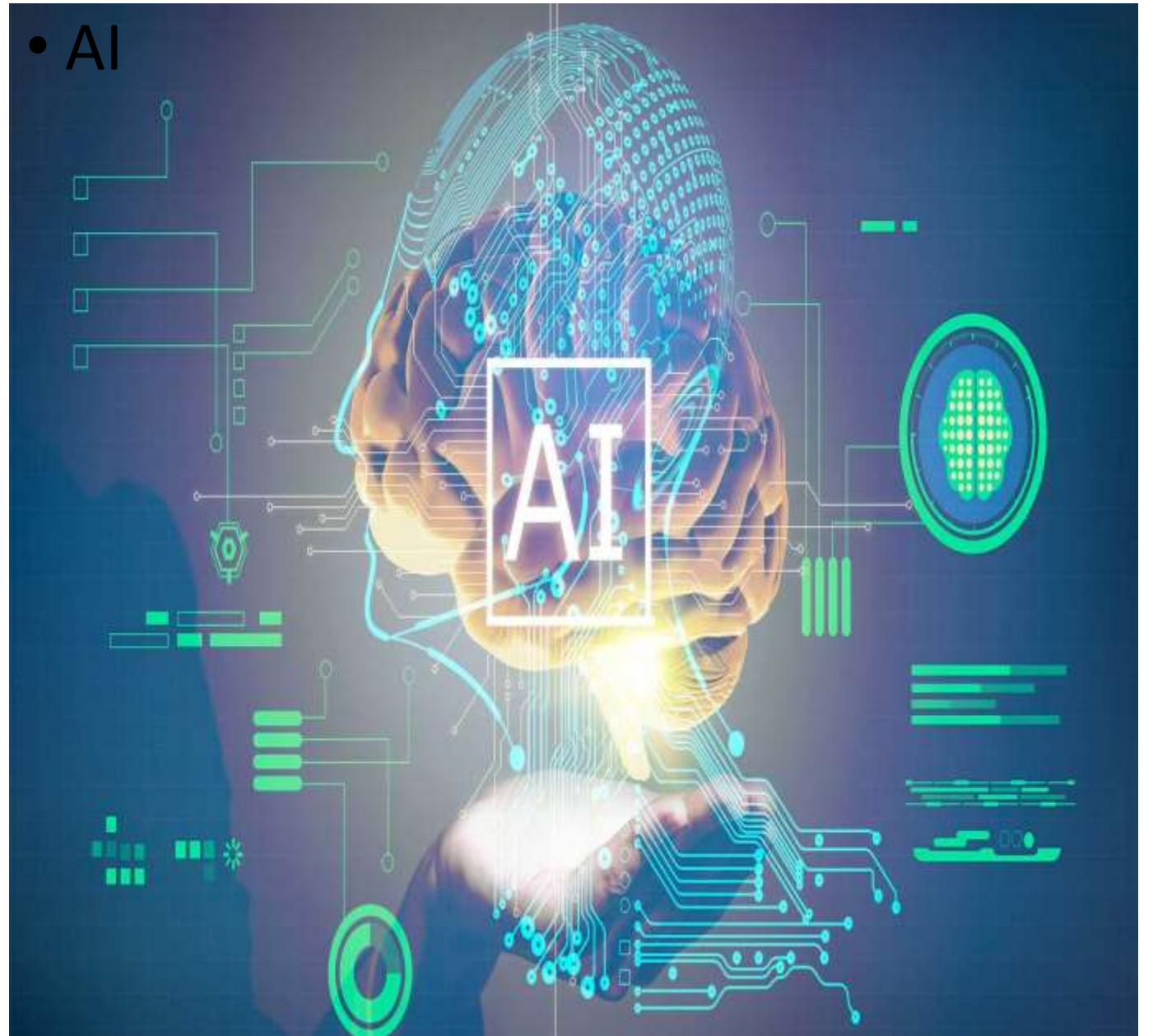


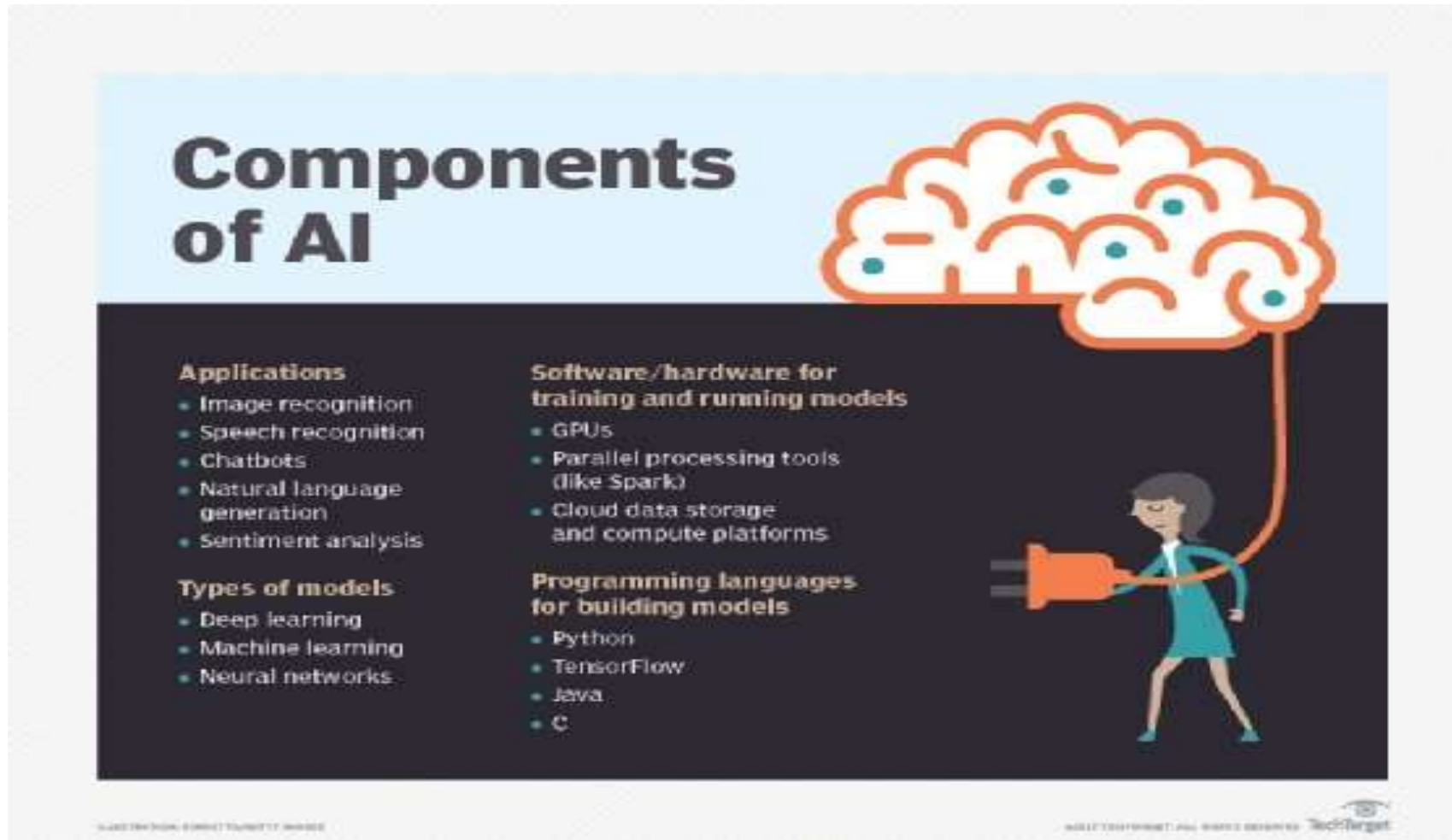
Artificial Intelligence

Artificial Intelligence

- ✓ *What is Artificial Intelligence?*
- ✓ *Artificial Intelligence Importance.*
- ✓ *Types of Artificial Intelligence.*
- ✓ *Applications of AI.*



• ***Artificial Intelligence** refers to the intelligence of machines. This is in contrast to the natural intelligence of humans and animals. With Artificial Intelligence, machines perform functions such as learning, planning, reasoning and problem-solving. Most noteworthy, Artificial Intelligence is the simulation of human intelligence by machines. Many experts believe AI could solve major challenges and crisis situations*



Types of Artificial Intelligence

First of all, the categorization of Artificial Intelligence is into four types. Arend Hintze came up with this categorization. The categories are as follows:

Type 1: Reactive machines – These machines can react to situations. A famous example can be Deep Blue, the IBM chess program. Most noteworthy, the chess program won against [Garry Kasparov](#), the popular chess legend. Furthermore, such machines lack memory. These machines certainly cannot use past experiences to inform future ones. It analyses all possible alternatives and chooses the best one.

Type 2: Limited memory – These AI systems are capable of using past experiences to inform future ones. A good example can be self-driving cars. Such cars have decision making systems. The car makes actions like changing lanes. Most noteworthy, these actions come from observations. There is no permanent storage of these observations.

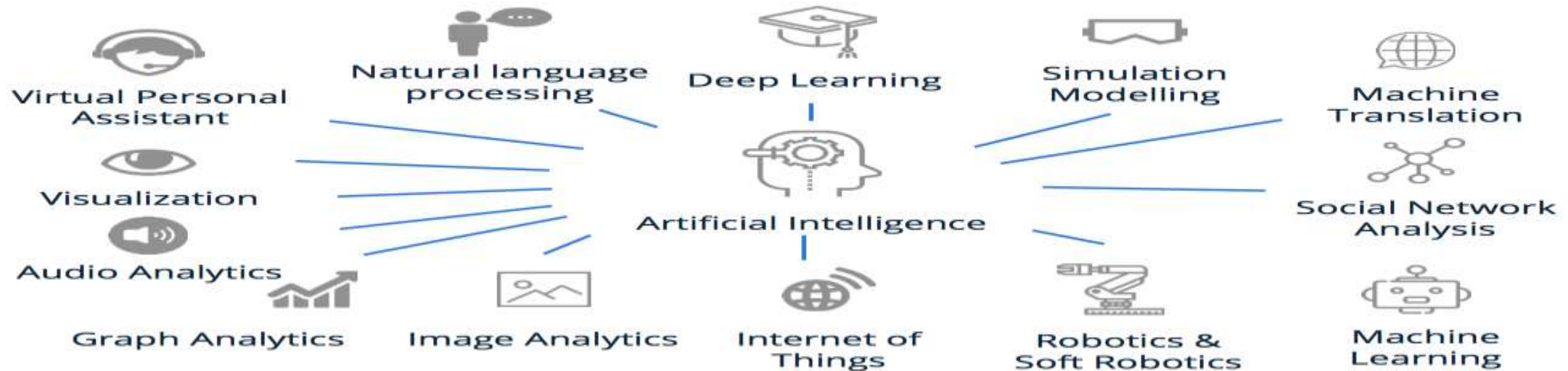
Type 3: Theory of mind – This refers to understand others. Above all, this means to understand that others have their beliefs, intentions, desires, and opinions. However, this type of AI does not exist yet.

Type 4: Self-awareness – This is the highest and most sophisticated level of Artificial Intelligence. Such systems have a sense of self. Furthermore, they have awareness, consciousness, and emotions. Obviously, such type of technology does not yet exist. This technology would certainly be a revolution

Applications of Artificial Intelligence

- ✓ First of all, AI has significant use in healthcare. Companies are trying to develop technologies for quick diagnosis. Artificial Intelligence would efficiently operate on patients without human supervision. Such technological surgeries are already taking place. Another excellent healthcare technology is IBM Watson.
- ✓ Artificial Intelligence in business would significantly save time and effort. There is an application of robotic automation to human business tasks. Furthermore, Machine learning algorithms help in better serving customers. Chatbots provide immediate response and service to customers.
- ✓ Artificial Intelligence in agriculture is used to identify defects and nutrient deficiencies in the soil. This is done using computer vision, robotics, and machine learning, AI can analyze where weeds are growing. AI bots can help to harvest crops at a higher volume and faster pace than human laborers.

Possible applications for Artificial Intelligence



References and Resources on Artificial Intelligence

- Stuart Russell and Peter Norvig, *Artificial Intelligence: A Modern Approach*, Second Edition, Prentice-Hall, 2003 -- the leading introductory textbook in the field.
- Peter Norvig, *AI on the Web*, <http://aima.cs.berkeley.edu/ai.html> -- a list of over 800 links on various aspects of artificial intelligence.
- Austrian Research Institute AI bibliography (62,000 entries as of December 1999)

