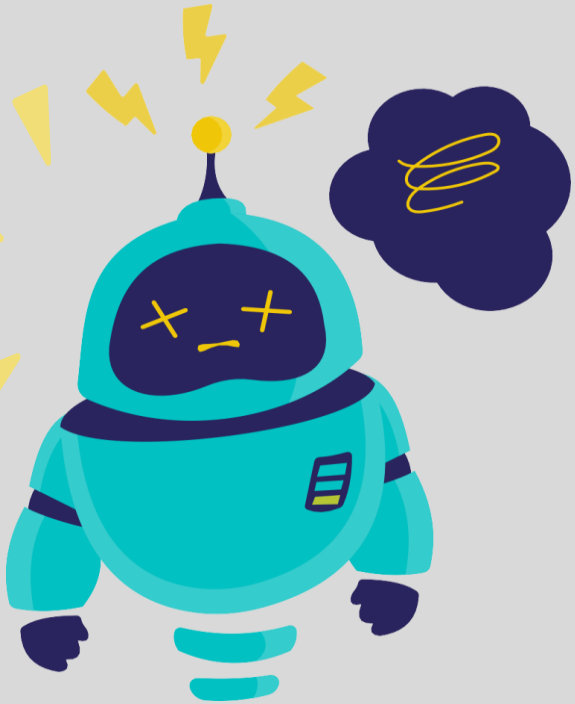
ARTIFICAL INTELLIGENCE



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What do you think Artificial Intelligence is?

The power of a machine to copy intelligent human behavior.

What is Artificial Intelligence?

Artificial defines "manmade," and intelligence defines "thinking power", hence AI means "a man-made thinking power."

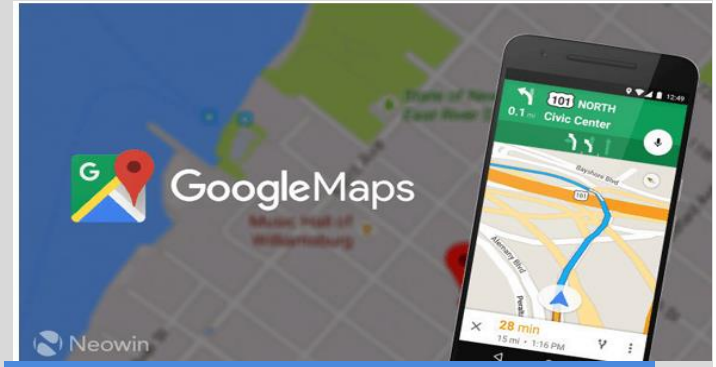
It is a branch of computer science by which we can create intelligent machines which can behave like a human, think like humans, and able to make decisions."

Examples of these tasks are visual perception, speech recognition, decision-making, and translation between languages.

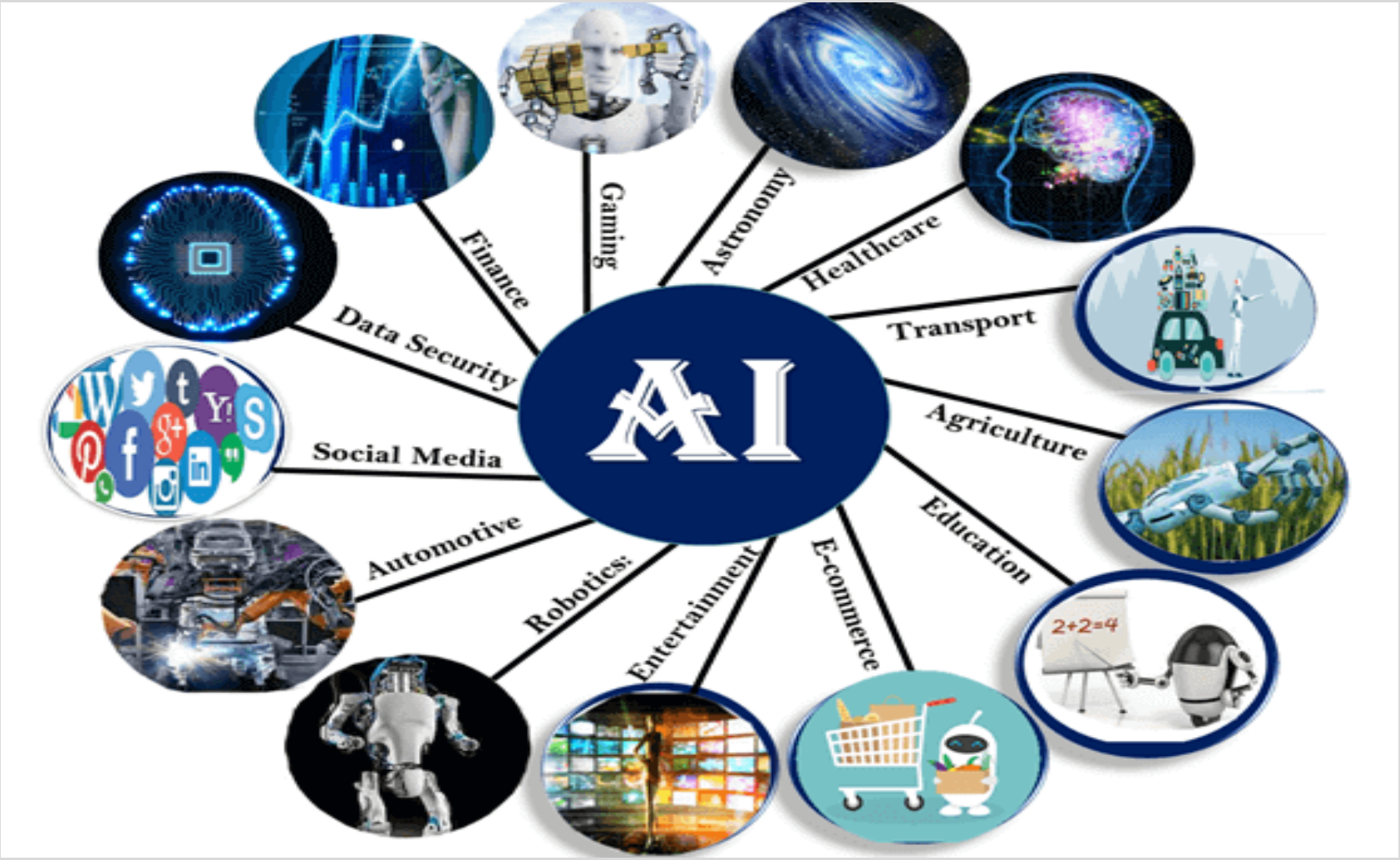
Real Life A.I. Examples

AI can be used for various situations, but these are some examples of AI in our daily life.

- ❑ Automated Cars
- ❑ Navigation Systems
- ❑ Chatbots
- ❑ Human vs Computer Games
- ❑ Face Recognition
- ❑ Virtual Assistance
- ❑ Text Editor



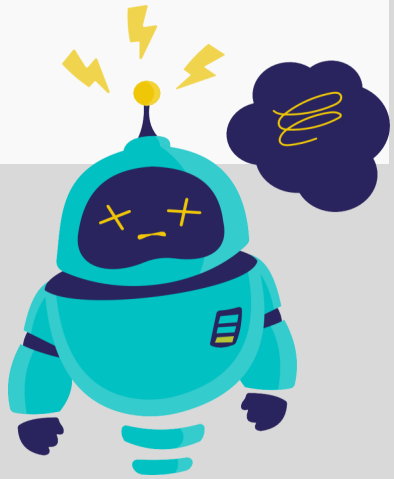
Applications of Artificial Intelligence



Weak/Narrow A.I.

Machines with weak Artificial Intelligence are made to respond to specific situations, but can not think for themselves.

Apple Sirii a good example of Narrow AI, but it operates with a limited pre-defined range of functions. playing chess, purchasing suggestions on e-commerce site, self-driving cars, speech recognition, and image recognition.



Strong A.I.

A machine with strong A.I. is able to think and act just like a human. It is able to learn from experiences.

Strong AI include capability include the ability to think, to reason, solve the puzzle, make judgments, plan, learn, and communicate by its own.Since there are no real life examples of strong A.I. yet, the best representation would be how Hollywood portrays robots.

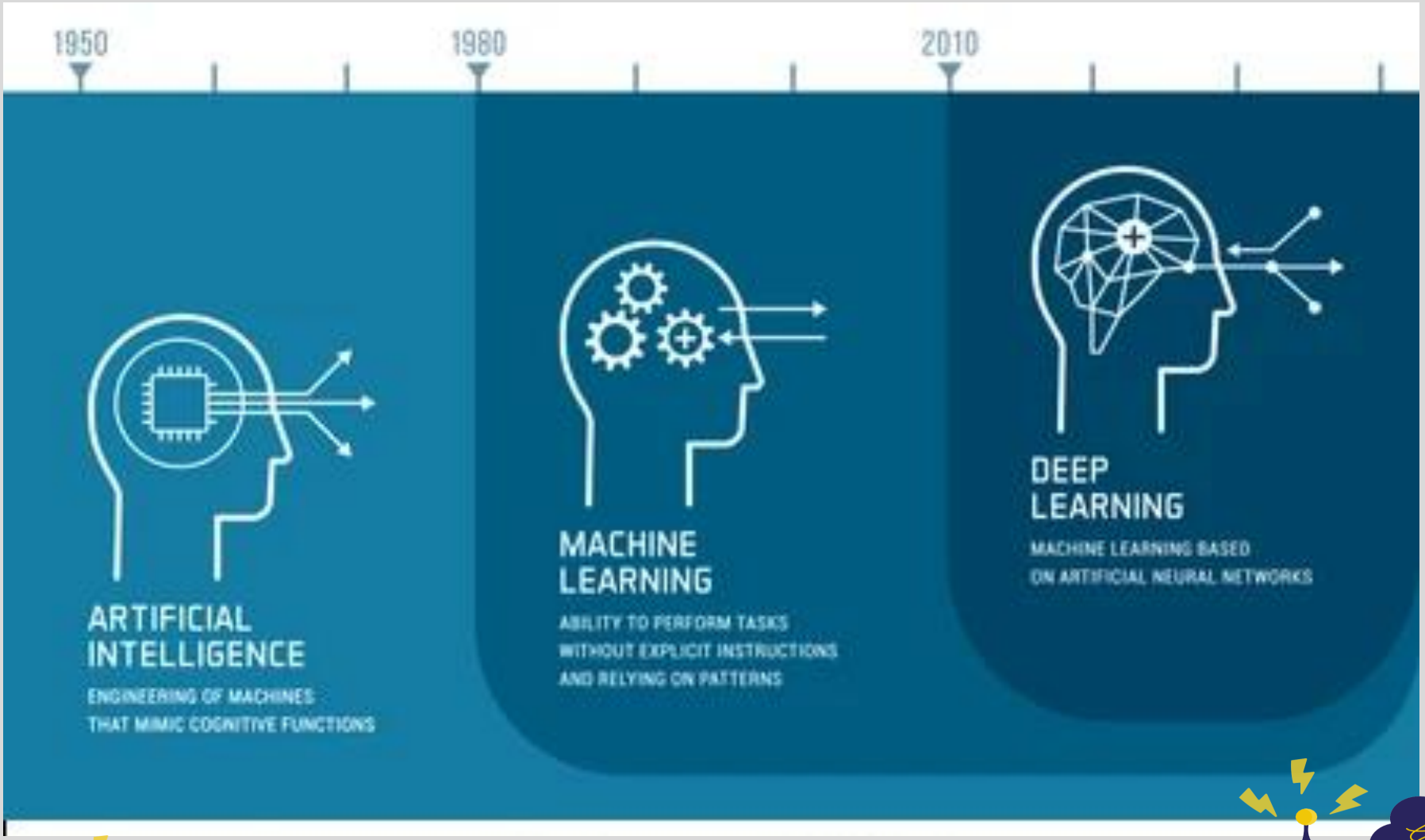
Artificial Intelligence Test

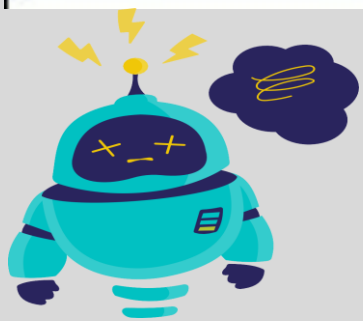
The Turing Test

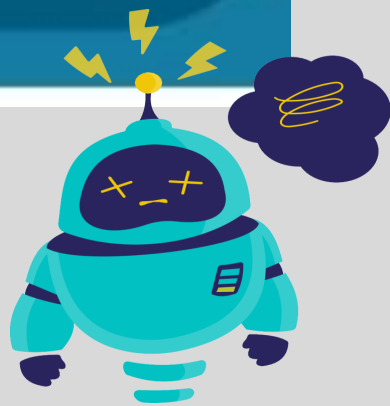
In the 1950s Developed by **Alan Turing** which is used to determine the level of intelligence of a computer. Involves an interpreter, a human, and a computer.

The computer and human have separate conversations with the interpreter.

If the interpreter can’t guess which is the computer or if the interpreter gets it wrong then the computer has Artificial Intelligence.

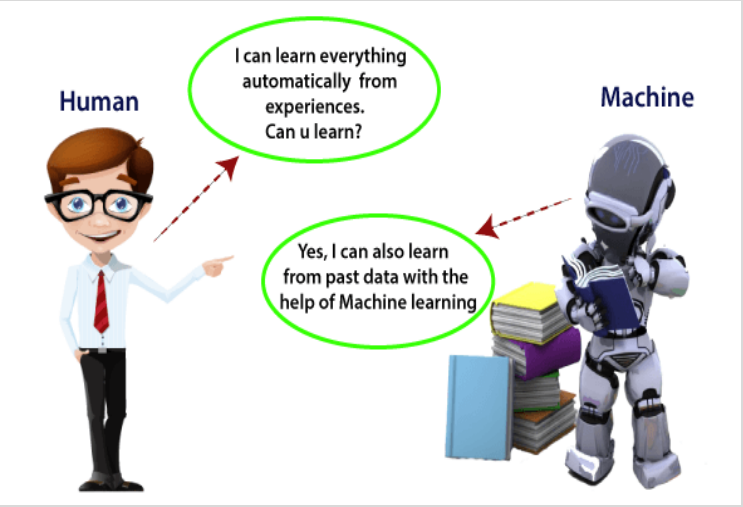

1950
1980
2010
ARTIFICIAL INTELLIGENCE
ENGINEERING OF MACHINES THAT MIMIC COGNITIVE FUNCTIONS
MACHINE LEARNING
ABILITY TO PERFORM TASKS WITHOUT EXPLICIT INSTRUCTIONS AND RELYING ON PATTERNS
DEEP LEARNING
MACHINE LEARNING BASED ON ARTIFICIAL NEURAL NETWORKS

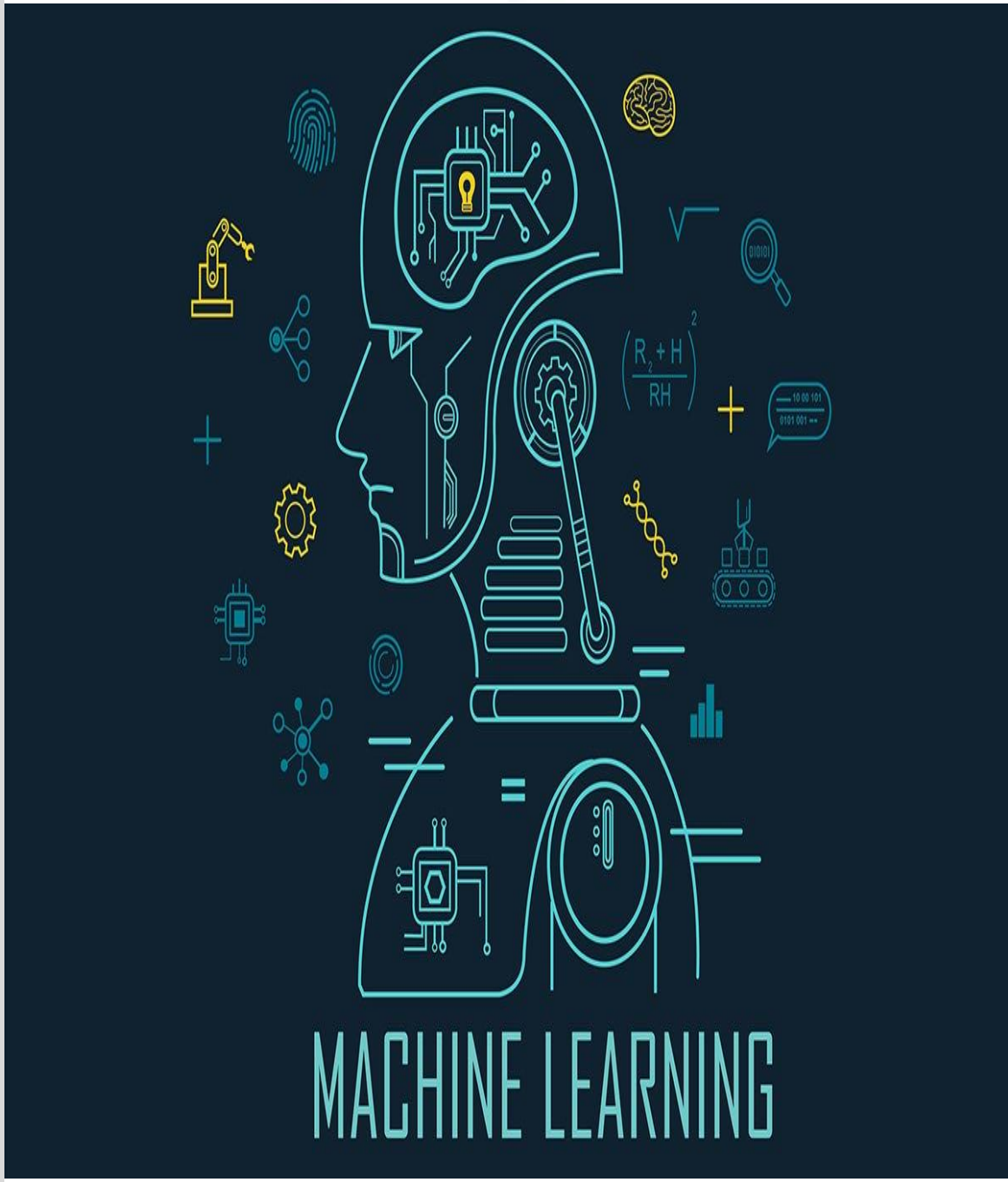




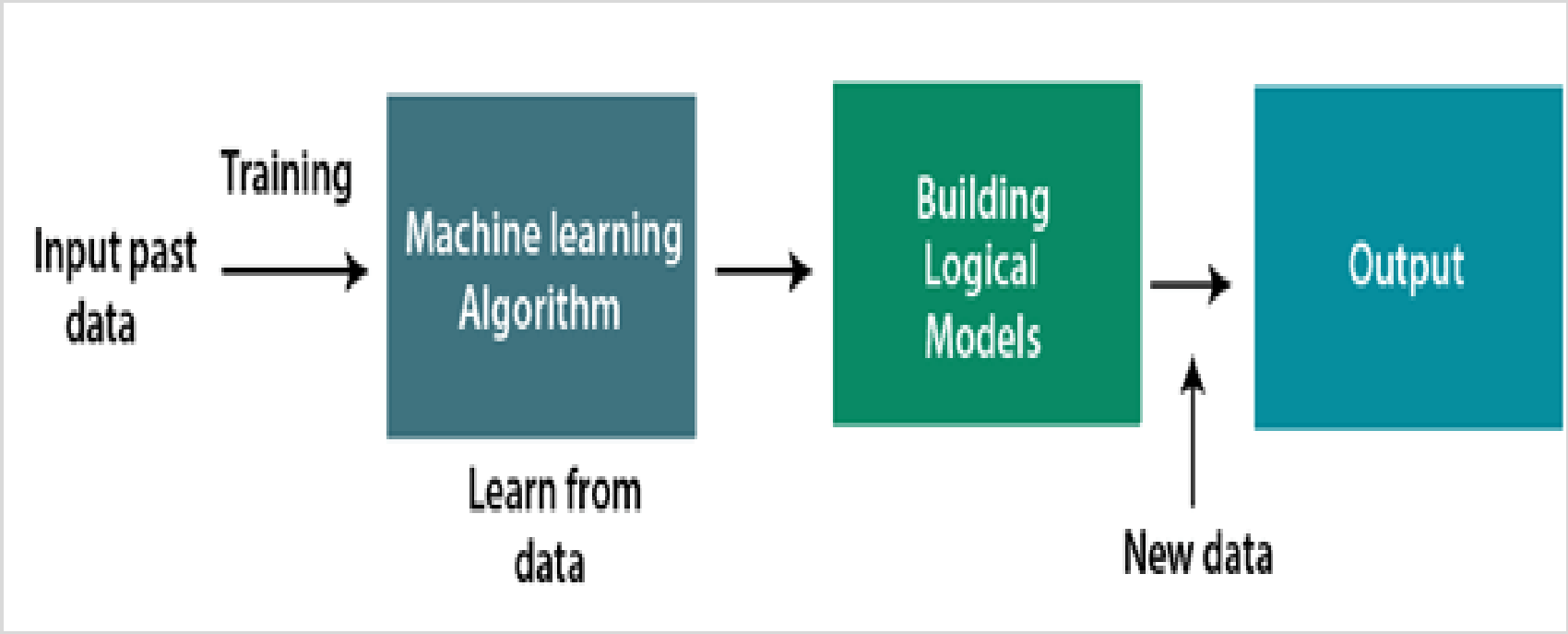
Machine Learning

An application of Artificial Intelligence that gives machines the ability to learn and improve without the help of humans or new programming.





Machine Learning



TYPES OF MACHINE LEARNING

Supervised Machine Learning

Unsupervised Machine Learning

Semi-Supervised Learning

Reinforcement Learning

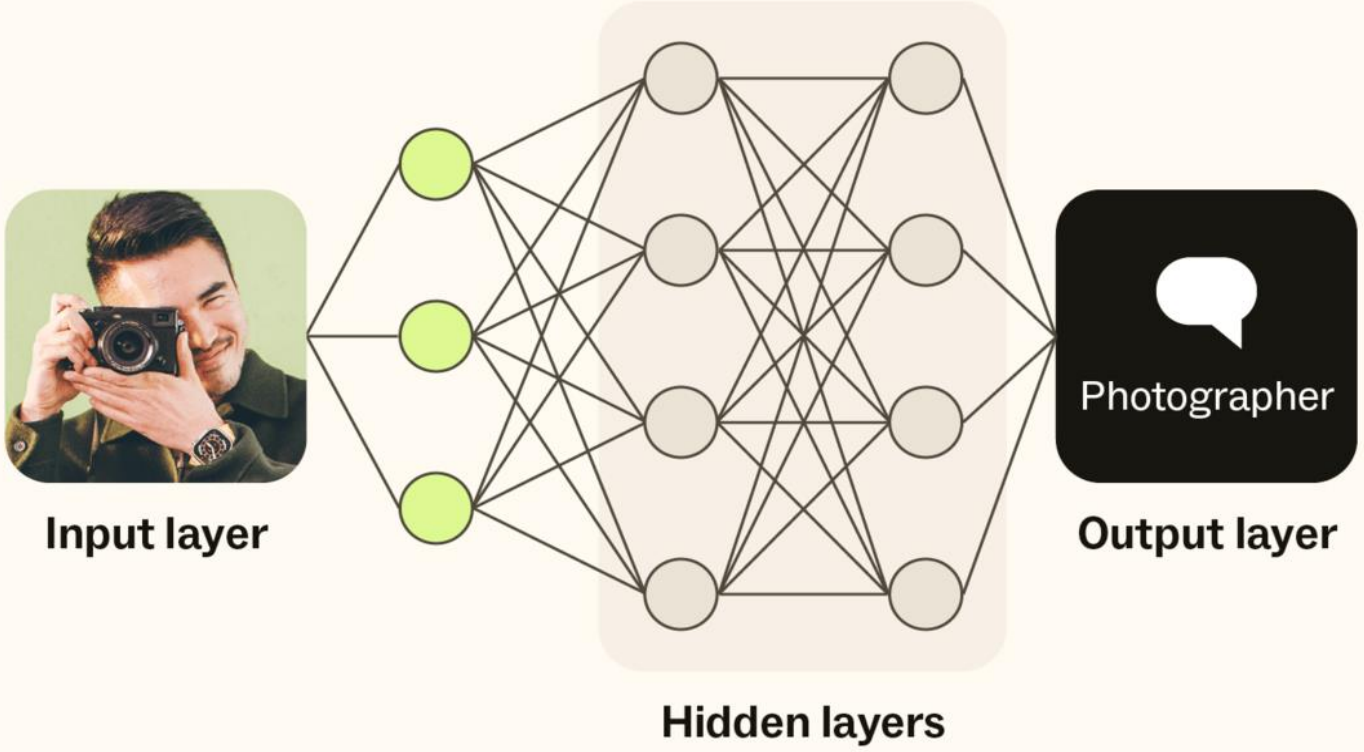
SUPERVISED LEARNING

UNSUPERVISED LEARNING

REINFORCEMENT LEARNING

The deep learning process

The algorithm receives data, runs it through the input and hidden layers, and generates an output.

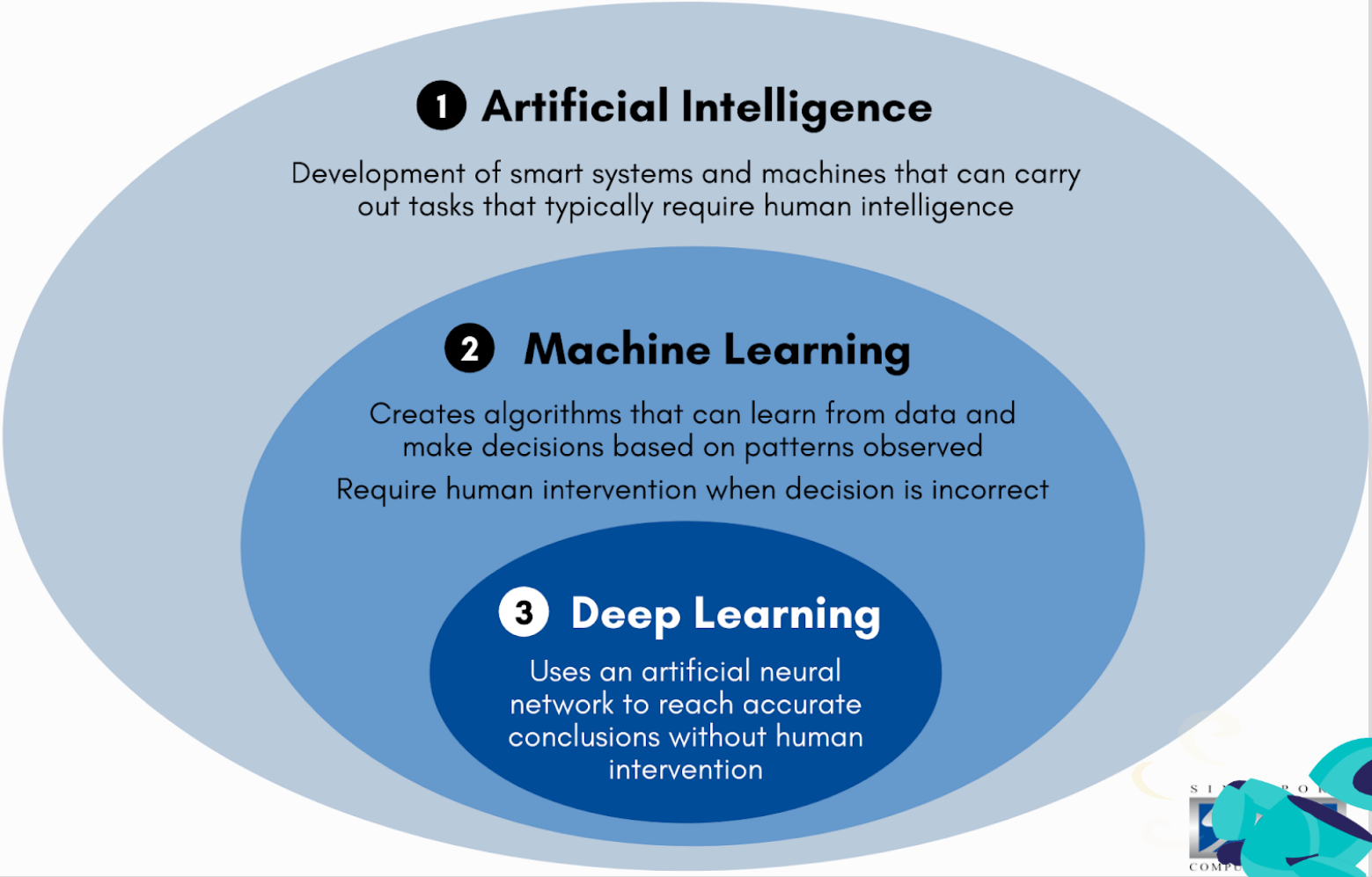


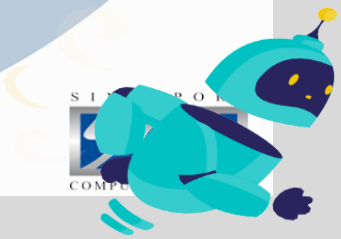
Deep Learning Applications

- Virtual Assistants
- Autonomous Vehicles
- Face Recognition

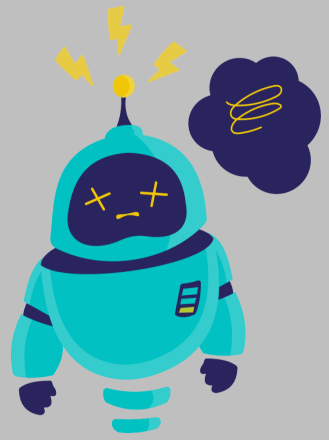
- Chatbots
- Sound Addition to Silent Films
- Colorization of Black and White Images

ARTIFICIAL INTELLIGENCE VS **MACHINE LEARNING** VS **DEEP LEARNING**





Future of AI



Healthcare

Security & Defense

Education

Banking & Finance

Autonomous Vehicles

Manufacturing

Entertainment

Workplace

THANK YOU