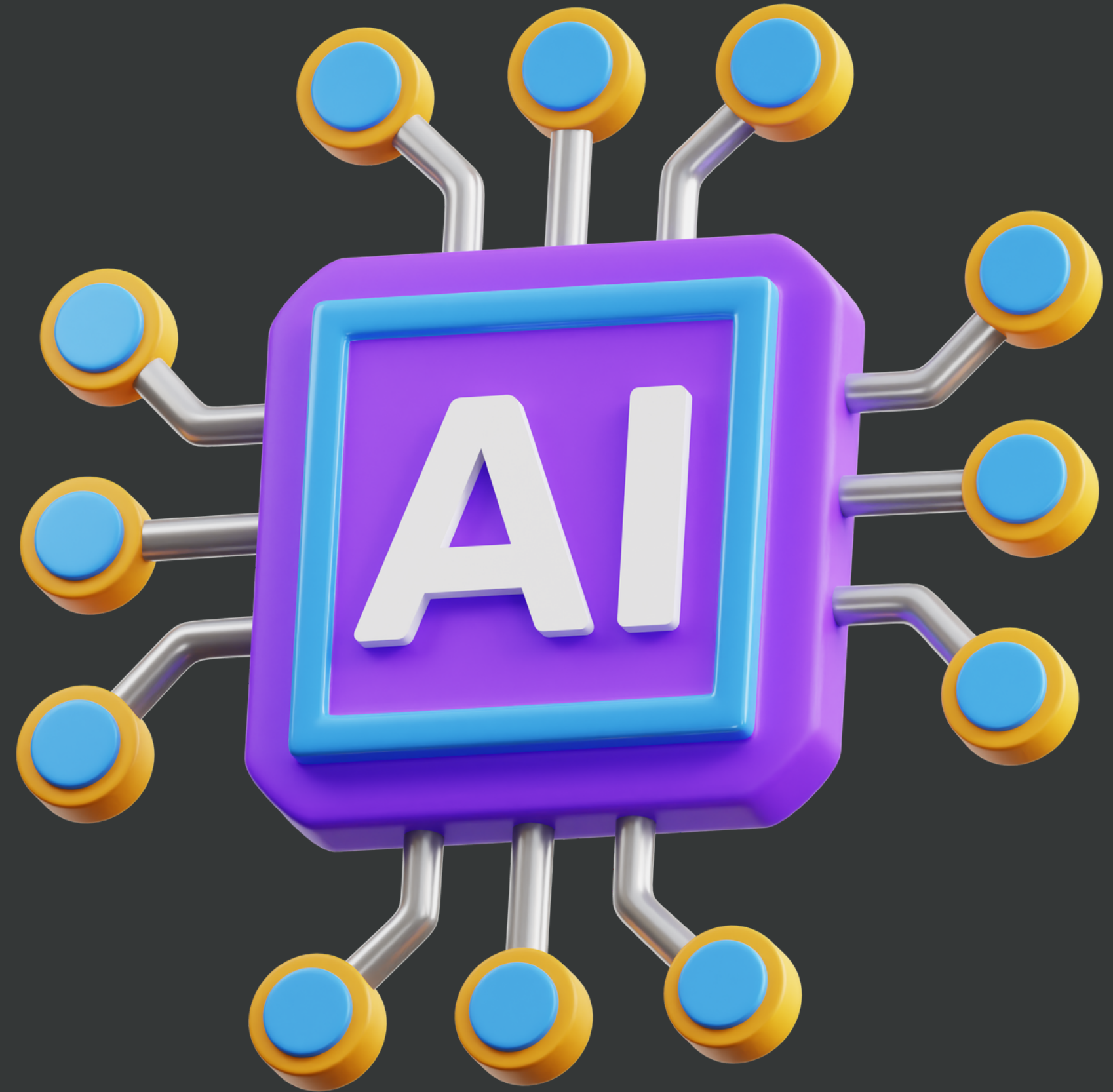


ARTIFICIAL INTELLIGENCE EXPLAINED.



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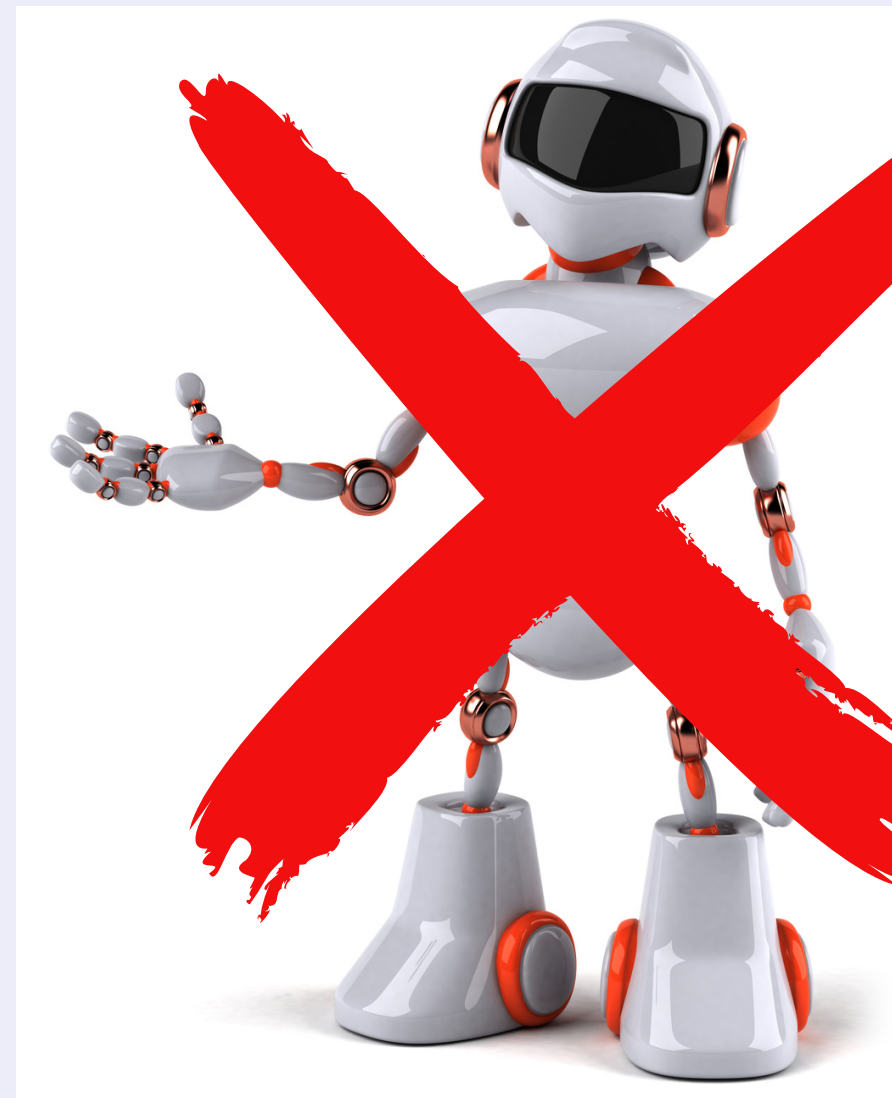
WHAT IS ARTIFICIAL INTELLIGENCE (AI)?

AI the science and engineering of making intelligent machines.

Goals

- Reasoning
- Learning
- Problem-solving
- Language understanding

**Robot and AI do not mean the same thing.*



*



Czech playwright, novelist and journalist Karel Čapek, who introduced the word “robot” in his 1920 hit play, R.U.R., or Rossum's Universal Robots.

INTELLIGENCE DEFINED

The ability to learn and perform suitable techniques to solve problems and achieve goals, appropriate to the context in an uncertain, ever-varying world.

TURING TEST

*The **Turing Test** is a deceptively simple method of determining whether a machine can demonstrate human intelligence: If a machine can engage in a conversation with a human without being detected as a machine, it has demonstrated human intelligence.*



Alan Turing
June 23, 1912 - June 7, 1954

WHAT TYPES OF AI ARE THERE?



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Narrow AI

- Inferior to human intelligence.
- Also known as weak AI.
- Lacks artificial consciousness or cognitive abilities.
- IBM Watson, AlphaGo, and Google Assistant are some examples.
- Can't solve unfamiliar problems.

WEAK

General AI

- Similar to human intelligence.
- Also known as strong AI or full AI.
- Has human-like consciousness and cognitive abilities.
- Yet to become a reality.
- Can solve unfamiliar problems.

STRONG

***SUPER AI (PURE SCIENCE FICTION)**

GOES BEYOND STRONG AI WHERE IT BECOMES SMARTER THAN HUMANS.



HOW DOES AI **LEARN**?

MACHINE LEARNING

USES **ALGORITHMS (AKA. A BLUEPRINT)** TO LEARN AND MAKE PREDICTIONS WITHOUT REQUIRING ANY PROGRAMS INSTALLED BEFOREHAND.



VS



VS



**SUPERVISED
LEARNING**

**MAKING
PREDICTIONS**

**UNSUPERVISED
LEARNING**

**LOOKING FOR
RELATIONSHIPS**

**REINFORCEMENT
LEARNING**

**USING THE
ENVIROMENT**

BONUS!



A TYPE OF MACHINE LEARNING THAT PROCESSES LARGE AMOUNTS OF INFORMATION **FASTER AND EASIER.**

CREATES **ARTIFICIAL "NEURONS"** LIKE WE HAVE IN OUR BRAIN TO LEARN AN ENORMOUS OF INFORMATION.

PUTTING IT ALL TOGETHER



Artificial Intelligence - a field of computer science enables machines to imitate human intelligence

Machine Learning - branch of AI provides machines the ability to automatically learn

Deep Learning - subfield of machine learning based on artificial neural networks

