
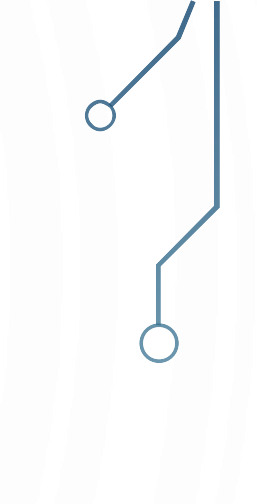
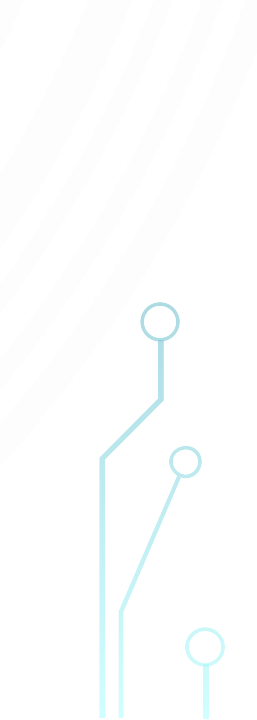


A decorative graphic on the left side of the slide consisting of a network of thin, light blue lines. These lines form a complex, branching pattern that resembles a circuit board or a neural network. Some lines end in small circles, while others are open. The overall effect is a modern, technological aesthetic.

INTRODUCTION TO **ARTIFICIAL INTELLIGENCE** FOR IT & NON-IT PROFESSIONALS


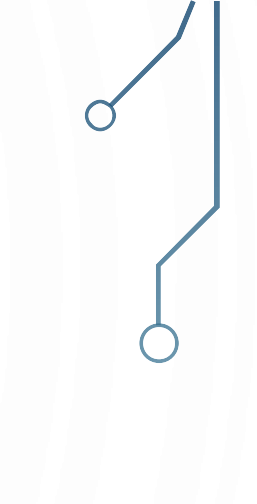
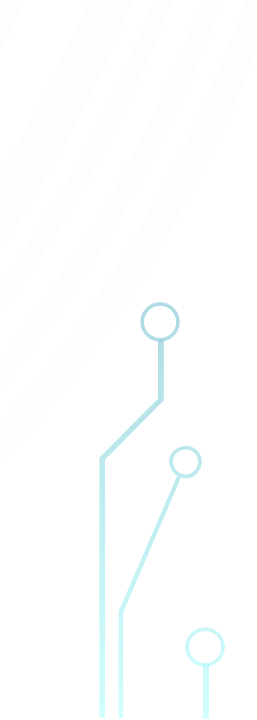


INTRODUCTION

- Artificial intelligence is an **unregulated term**.
 - No central group to **set a standard definition or regulate the usage of the term**.
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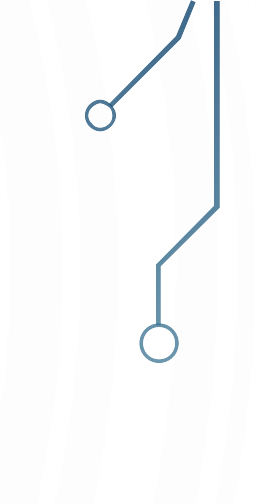
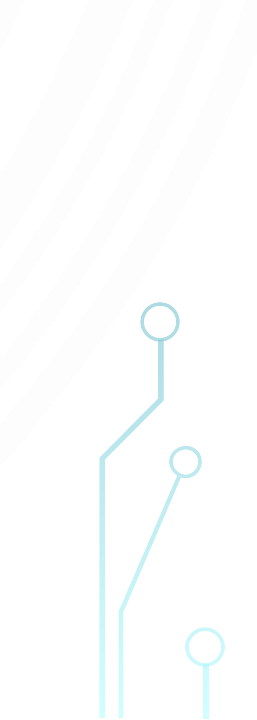


INTRODUCTION

- **Second**, artificial intelligence **isn't a specific thing**.
 - It's a **categorical structure** with a lot of different topics underneath it.
 - “**you'll know it when you see it**” type of definition not easily looked up in a dictionary.
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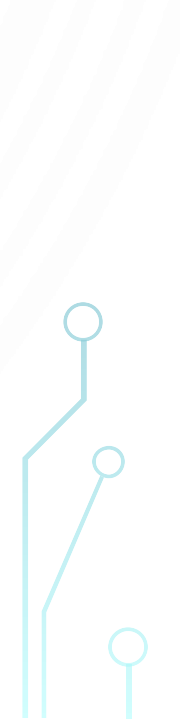


INTRODUCTION

- AI is a **scientific or technical term**.
 - As opposed to a field like biology, which does have a particular **scientific** meaning,
 - **Artificial intelligence** is more of a layman's term.
 - **Casual reference** to a broad collection of ideas, some of which may or may not be **technical**
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INTRODUCTION

- Relatively new science where there is a lot of scope in research and education and application areas.
 - As opposed to older disciplines
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WHAT IS INTELLIGENCE?

- It is a **mental quality** consisting of the ability
 1. to learn from **experience** (a child learns from experience, hot vs cold, small vs big, attracted by love)
 2. To **solve problems**: everyday issues, tyre puncture and get late for office.
 3. Use **knowledge** to **adapt** to new situations.

CHARACTERISTICS OF INTELLIGENCE

1. Ability of **problem solving**
2. Ability to **think, plan and schedule (timetable) constraint satisfaction**
3. **Memorize** , correct and efficient memory and information manipulation (exam preparation)
4. Ability to tackle **ambiguous and fuzzy problems (Temp/ weather)**
5. Ability to **understand and perceive**

EXAMPLE 1

Consider the following image where a **mouse** is trying to search a **maze** in order to find its way from the bottom left to the **piece of cheese** in the image.

- The mouse was intelligent enough to find a solution to the problem at hand .

EXAMPLE 2

- Let us consider another problem. Consider the sequence of numbers below: 1, 3, 7, 13, 21,... If you were asked to find the next number in the sequence what would be your answer? There are many ways but two ways mention below “adding the next even number to the”

$$2 + 1 = 3,$$

$$4 + 3 = 7,$$

$$6 + 7 = 13,$$

$$8 + 13 = 21$$

$$10 + 21 = 31$$

ANOTHER SEQUENCE OF NUMBERS

“subtract the first number in the sequence from the next in the sequence”.

$$3-1=2.$$

$$7-3=4.$$

$$13-7=6,$$

$$21-13=8$$