

# Team 6

# TOPIC:

AI (Artificial Intelligence)











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# CONTENT

1 Overview of Al

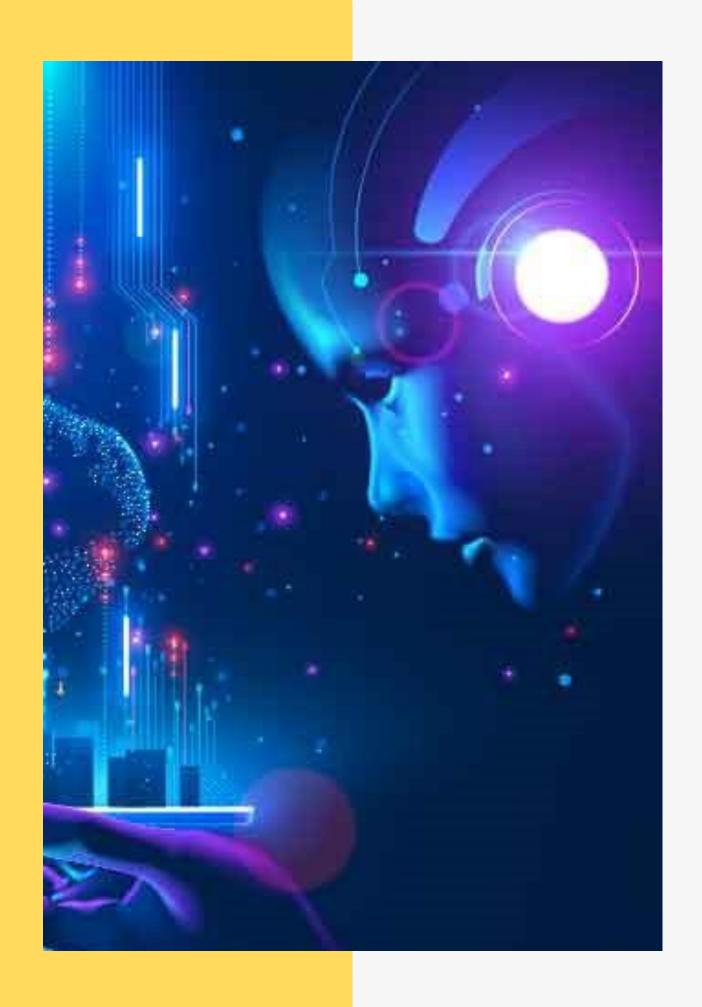
2 Benefits and Risks of Al

3 Application of AI in today's life

4 Conclusion

# Part 1:

Overview of AI





# What is Al?

Artificial intelligence (AI) is a field of computer science, using smart machines, capable of collecting, analyzing and processing complex data blocks at a wider, faster and more system. People.



# 1.2. History of AI

1950

Origins.

1970

Al winter and knowledge – based systems.

**2010 - persent** 

Bigdata and Deep leaning.

The Dartmouth Conference.

1956

1990

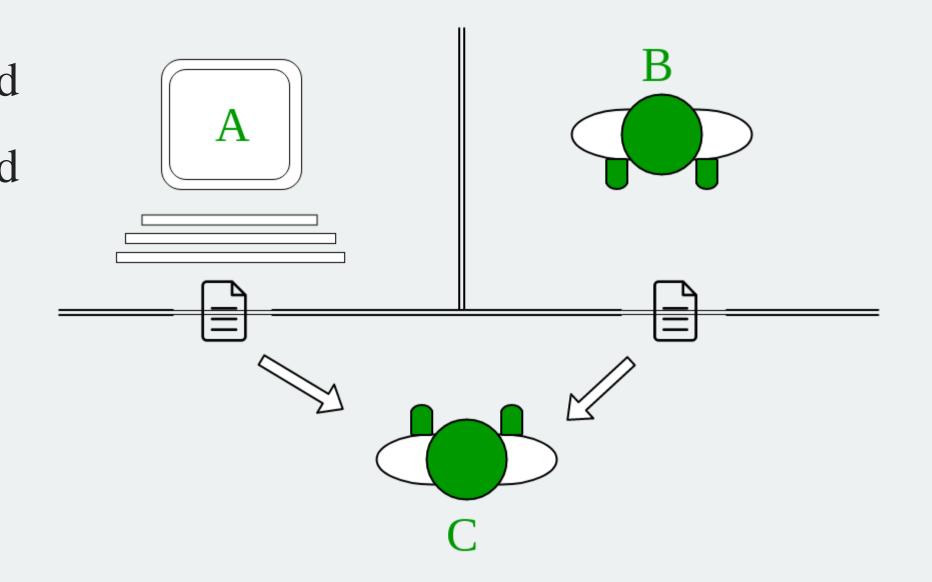
Rise of Machine Leaning.



# 1950: Origin

If humans use available information and rational thinking, to solve problems and make decisions - then why can't this work?

be with the help of machines?



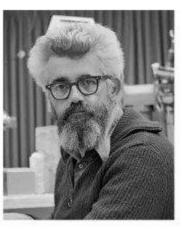


# 1956: The Dartmouth Conference

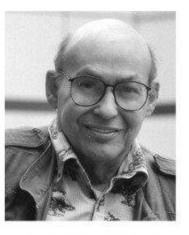
The <u>Dartmouth Conference</u> of 1956 is a seminal event in the history of AI, it was a summer research project that took place in the year 1956 at Dartmouth College in New Hampshire, USA.

This conference is considered a seminal moment in the history of AI, as it marked the birth of the field along with the moment the name "Artificial Intelligence" was coined.

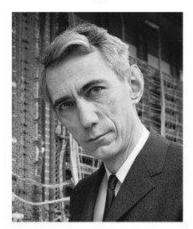
### 1956 Dartmouth Conference: The Founding Fathers of AI



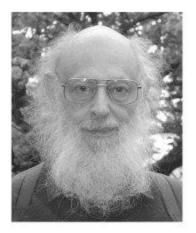
John MacCarthy



**Marvin Minsky** 



Claude Shannon



Ray Solomonoff



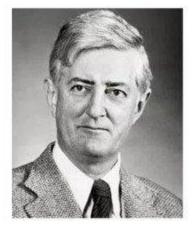
**Alan Newell** 



**Herbert Simon** 



**Arthur Samuel** 



Oliver Selfridge



**Nathaniel Rochester** 

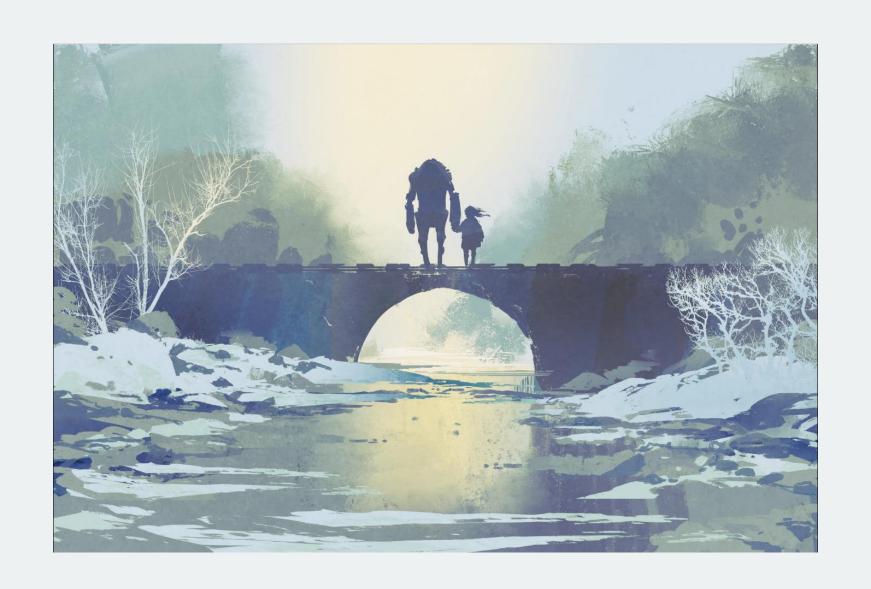


**Trenchard More** 



## 1970 AI winter

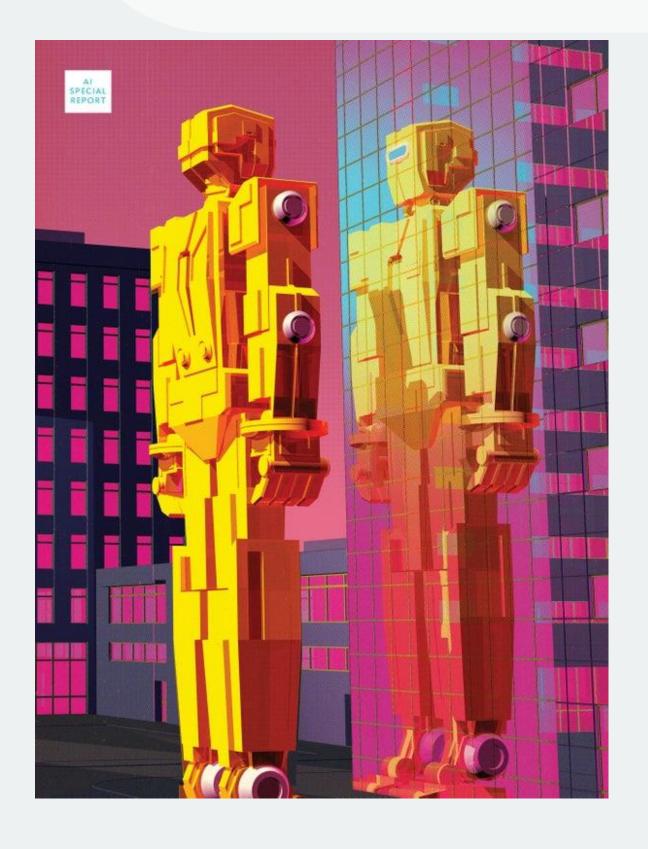
The AI Winter of the 1980s refers to a period of time when research and development in the field of Artificial Intelligence (AI) experienced a significant slowdown. This period of stagnation occurred after a decade of significant progress in AI research and development from 1974 to 1993.





# The 1990s marked a significant period in the rise of machine learning. During this decade, several key advancements and developments took place that laid the foundation for the machine learning techniques we see today. Here are some notable factors that contributed to the rise of machine learning in the 1990s

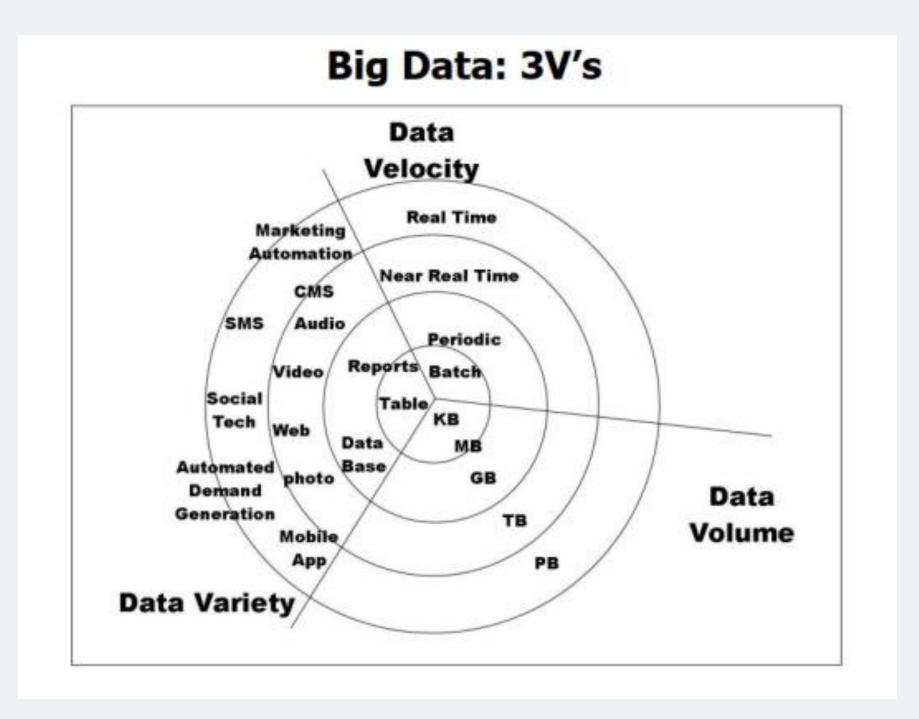
# 1990: Rise of Machine leaning





# 2000s – Persent: Bigdata - deeplearning

The concept of big data has been around for decades, but its rise to prominence in the context of artificial intelligence (AI) can be traced back to the early 2000s. Before we dive into how it relates to AI, let's briefly discuss the term Big Data.





# 1.3. AI technology classification

AI technology is divided into 4 main categories:

**O1** Purely Reactive.

The above type is the most basic form of Al

02 | Limited Memory.

This type is higher on Al's evolutionary scale

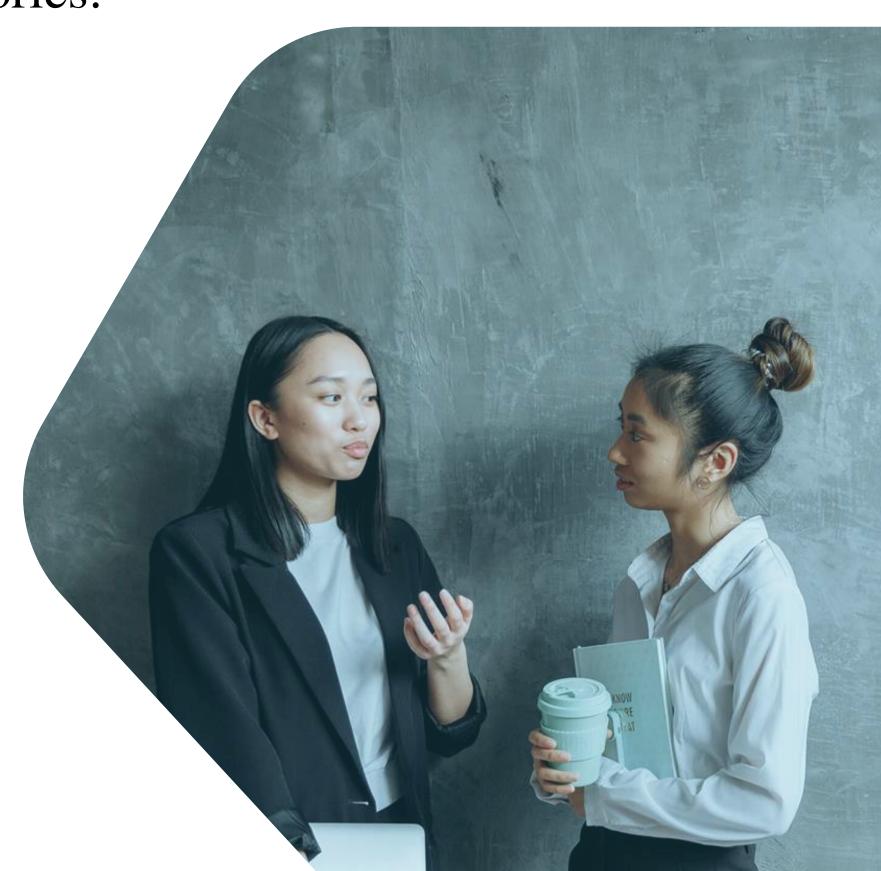
Theory Of Mind.

This type understands the thoughts and emotions that can affect human behavior

O4 Self-Aware.

This type can create countless types of copies of them

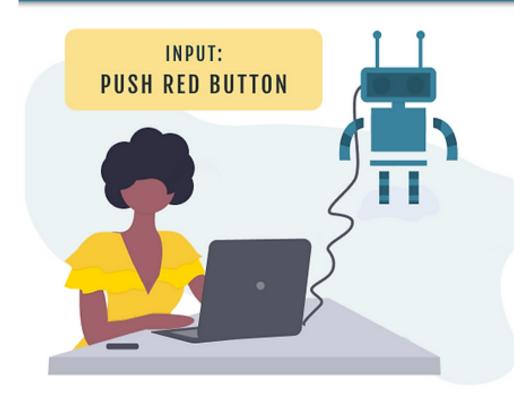


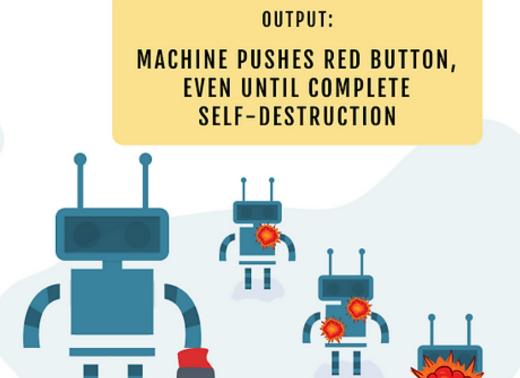


# Purely Reactive.

Machines perform Reactive basic operations. This level of A.I. is the simplest. These types react to some input with some output. There is no learning that occurs. This the first stage to any A.I. system. A machine learning that takes a human face as input and outputs a box around the face to identify it as a face is a simple, reactive machine. The model stores no inputs, it performs no learning.

# 4 TYPES OF ARTIFICIAL INTELLIGENCE TYPE I - REACTIVE MACHINES



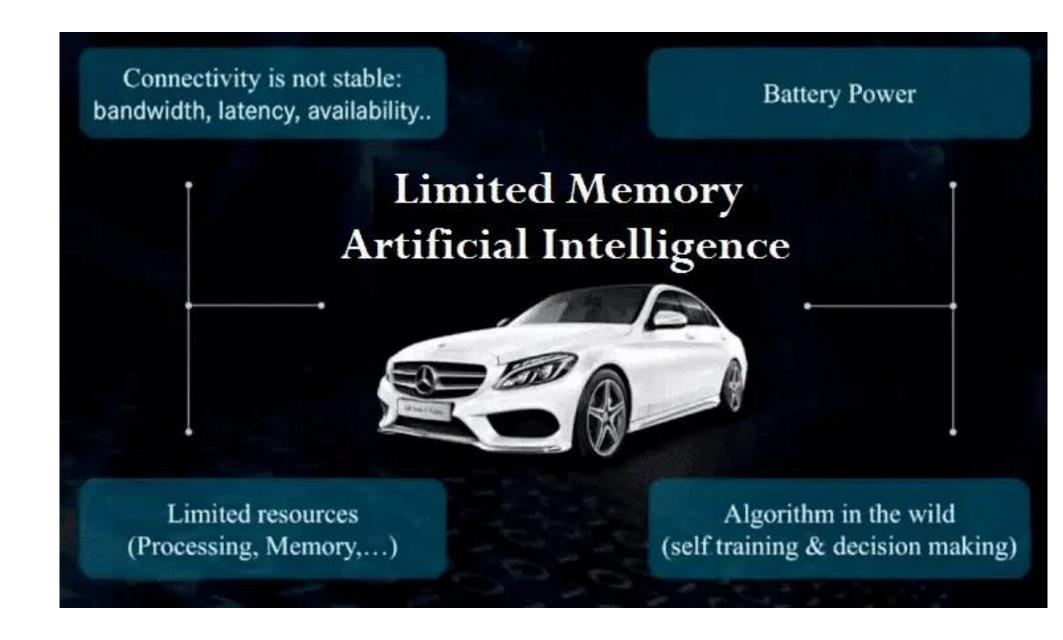






# Limited memory types refer to an A.I.'s ability to store previous data and/or predictions, using that data to make better predictions. With Limited Memory, machine learning architecture becomes a little more complex. Every machine learning model requires limited memory to be created, but the model can get deployed as a reactive machine type.

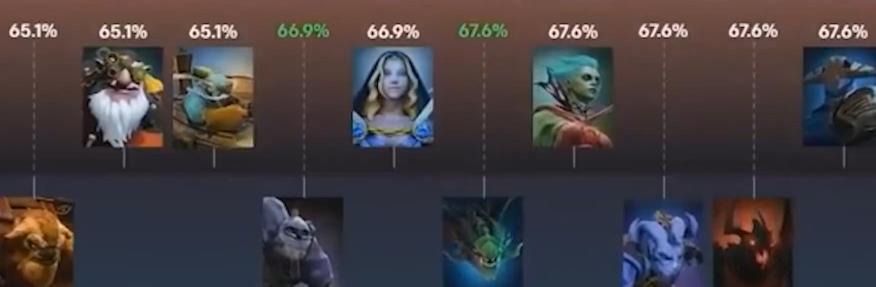
# Limited Memory.







Radiant



Human Dire

67.6% OpenAI Five Win Probability Estimate

# Theory Of Mind.

We have yet to reach Theory of Mind artificial intelligence types. These are only in their beginning phases and can be seen in things like self-driving cars. In this type of A.I., A.I. begins to interact with the thoughts and emotions of humans.





# A self-aware intelligence beyond the human has an independent intelligence, and likely, people will have to negotiate terms with the entity it created. What happens, good or bad, is anyone's guess.

# Self-Aware

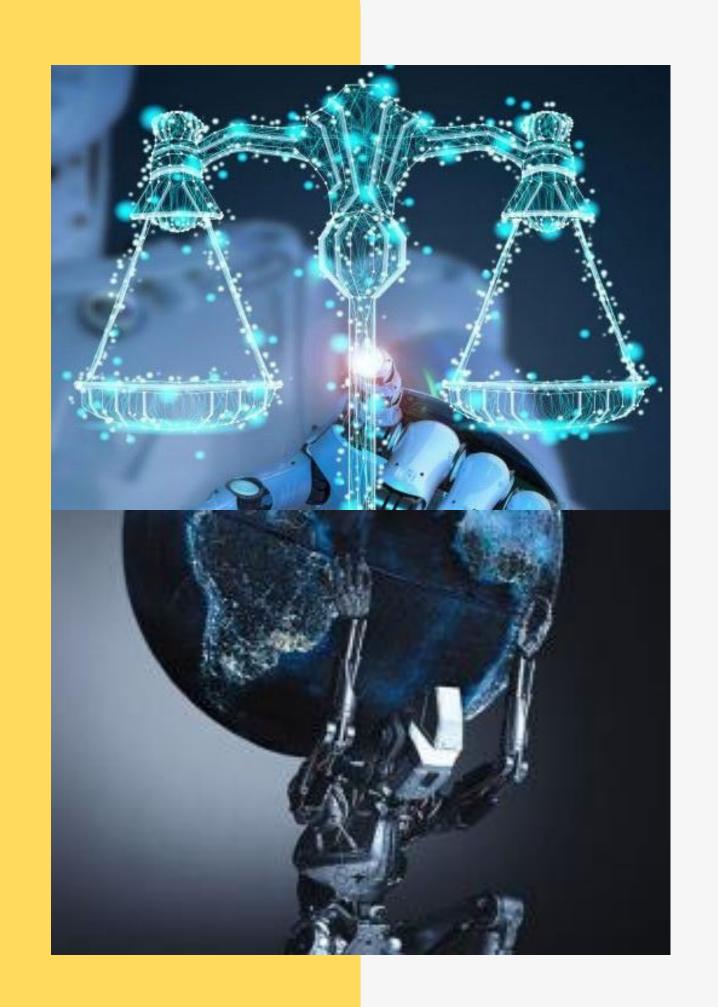






# Part 2:

# Benefits and Risks of AI





# 2.1. Benefits of artificial intelligence

AI is a great achievement of modern science, if you know how to apply it will bring a lot of benefits for you.

# Here are some benefits that artificial intelligence brings to humans:

- Detect and limit risks
- Save human Borland
- Liberate creativity
- Language bridge
- Personalized





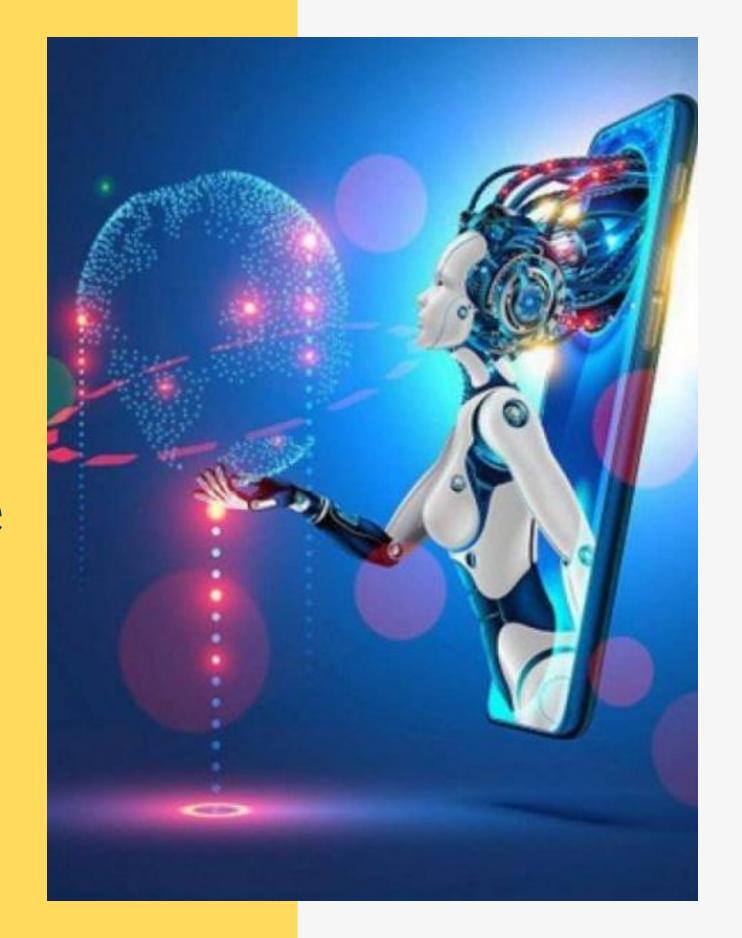
# **2.2. Risk**

Although AI is really useful in life, but it also has a negative side.

- 1. Due to working and excessive contact with machinery, awareness, creativity and criticism of people will become increasingly dropping.
- 2. It partly affects human health, when they depend on machines without physical activity.
- 3. Most likely, in the far future, when anyone is too smart, it can become out of control and turn machinery into the center of society.

# Part 3:

Application of AI in today's life



# 3.1. APPLICATION OF ARTIFICIAL INTELLIGENCE IN TODAY'S LIFE

### Manufacturing

 Production line using industrial robots



- Surgical robot
- Electronic record management

### **Ecommerce**

- Customer behavior analysis for appropriate production
- Support customers through chatbot



- Self -driving car
- Smart traffic regulatory system



### Virtual assistant

Who learns the living habits and predicts the emotions of the user, helping virtual assistance to handle the requirements more flexibly

for effective marketing







# Manufacturing



BMW Uses AI To Keep Production In Overdrive



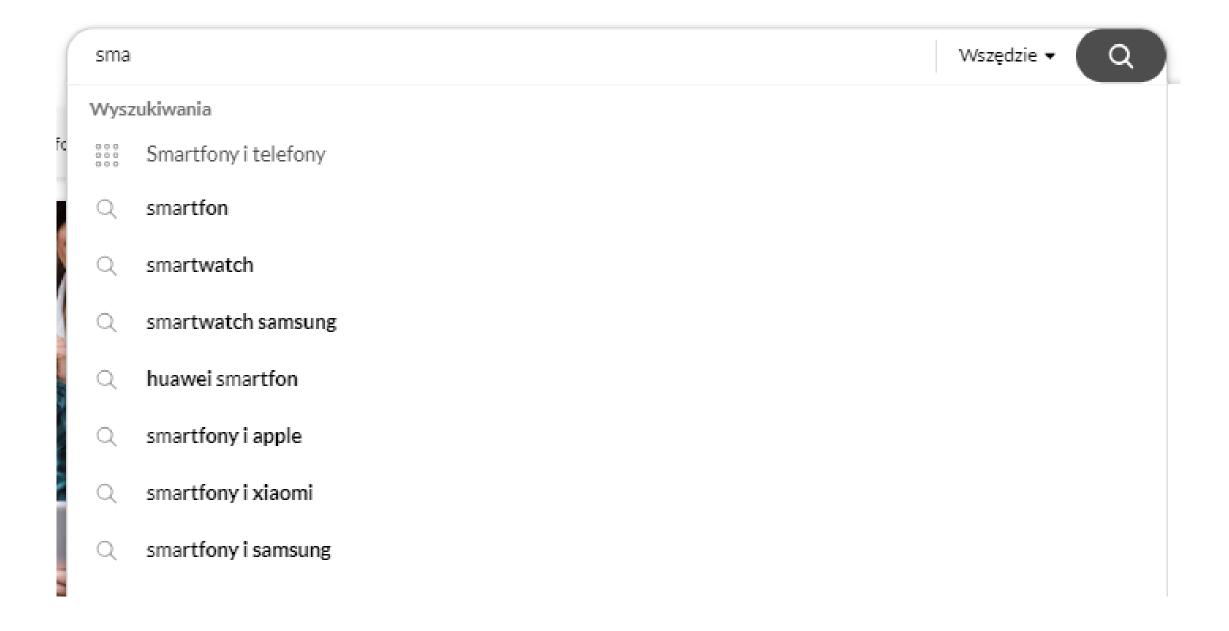
# Medical



Guiding physicians during minimally invasive surgical procedures



## **Ecommerce**



**Intelligent Search** 



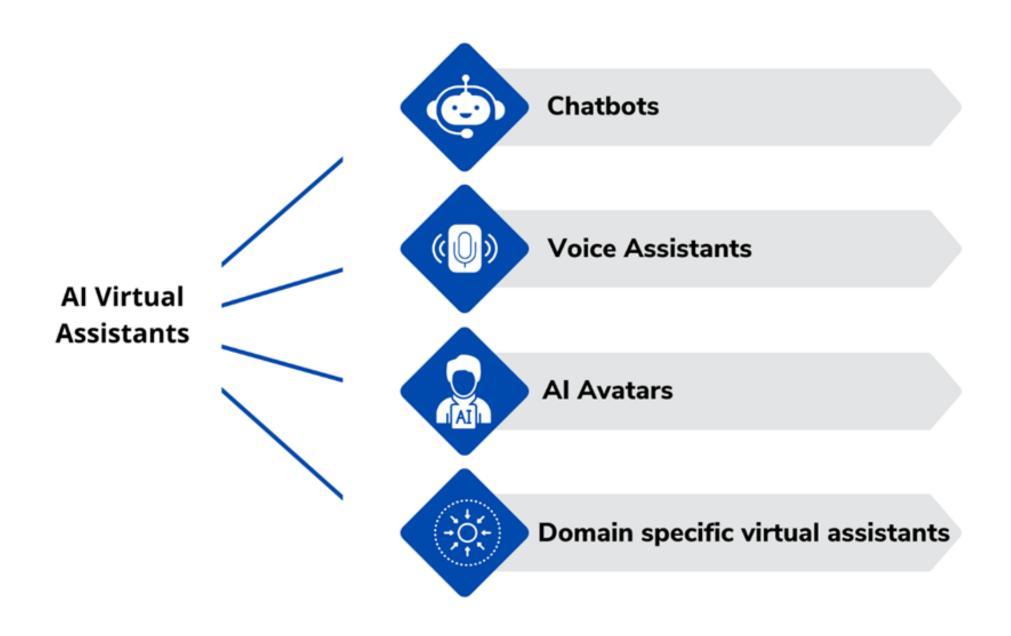
### **Traffic**



Traffic light detection on V7



### Virtual assistant



Types of Virtual Assistants



# Marketing



AI Takes Market Research To New Levels



# 3.2. AI inherits many ideas, views and techniques from other science

### **Psychology**

Research human mind.

### Study of language

Research meaning and structure of language.

### **Computer science**

Make anyone into reality.

### Math

Logic probability theories, decisions and calculations.

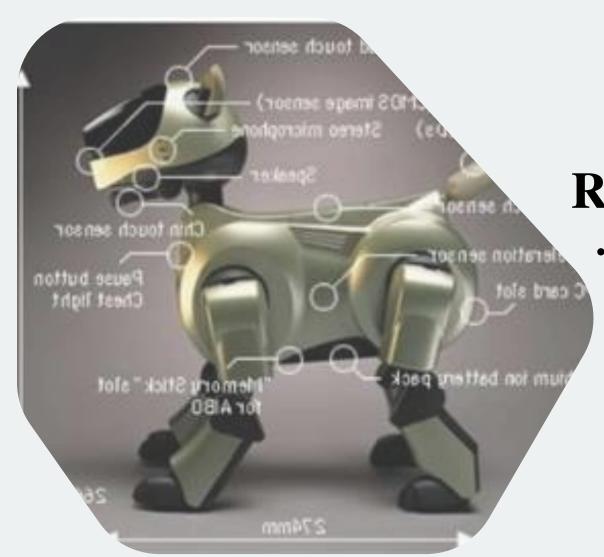
### **Philosophy**

The theory of arguments and learning.



# 3.3. Achievement

### Sony Aibo



### RoboCup

- The international football tournament for robots, first held in 1997 in Japan.
- At the same time promote research and training in the field of artificial intelligence

# Robot dog

Sony was first produced in 1999

# Honda Humanoid Robot & Asimo

### **Robot World**





# Conclusion

- Al is a transformative technology that brings great benefits to the economy and society.
- Al has the potential to revolutionize the way we live, work, learn, explore, and communicate.
- Al research is a developing national priority, to enhance economic prosperity, improve education and quality of life, and enhance national security.



