

Artificial Intelligence &

Machine Learning

A walkthrough of Artificial Intelligence
and Machine Learning Applications.

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Agenda

What we'll discuss today

01

What are Artificial Intelligence and its applications?

02

How to approach this field for a career?

What is Artificial Intelligence?

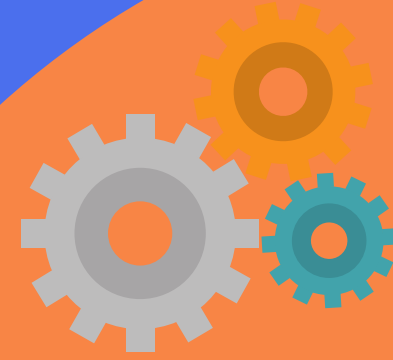
Artificial Intelligence is a field of computer science that attempts to create machines that act rationally in response to their environment.





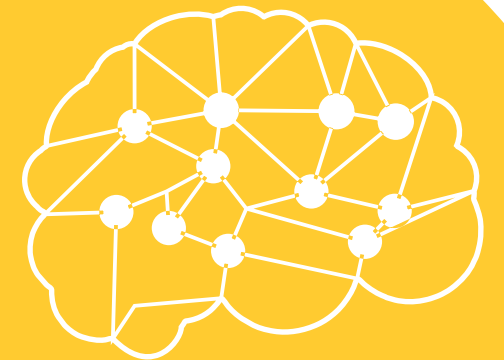
Artificial Intelligence

A technique that enables a computer to mimic human behavior.



Machine Learning

Ability to learn without explicitly being programmed.

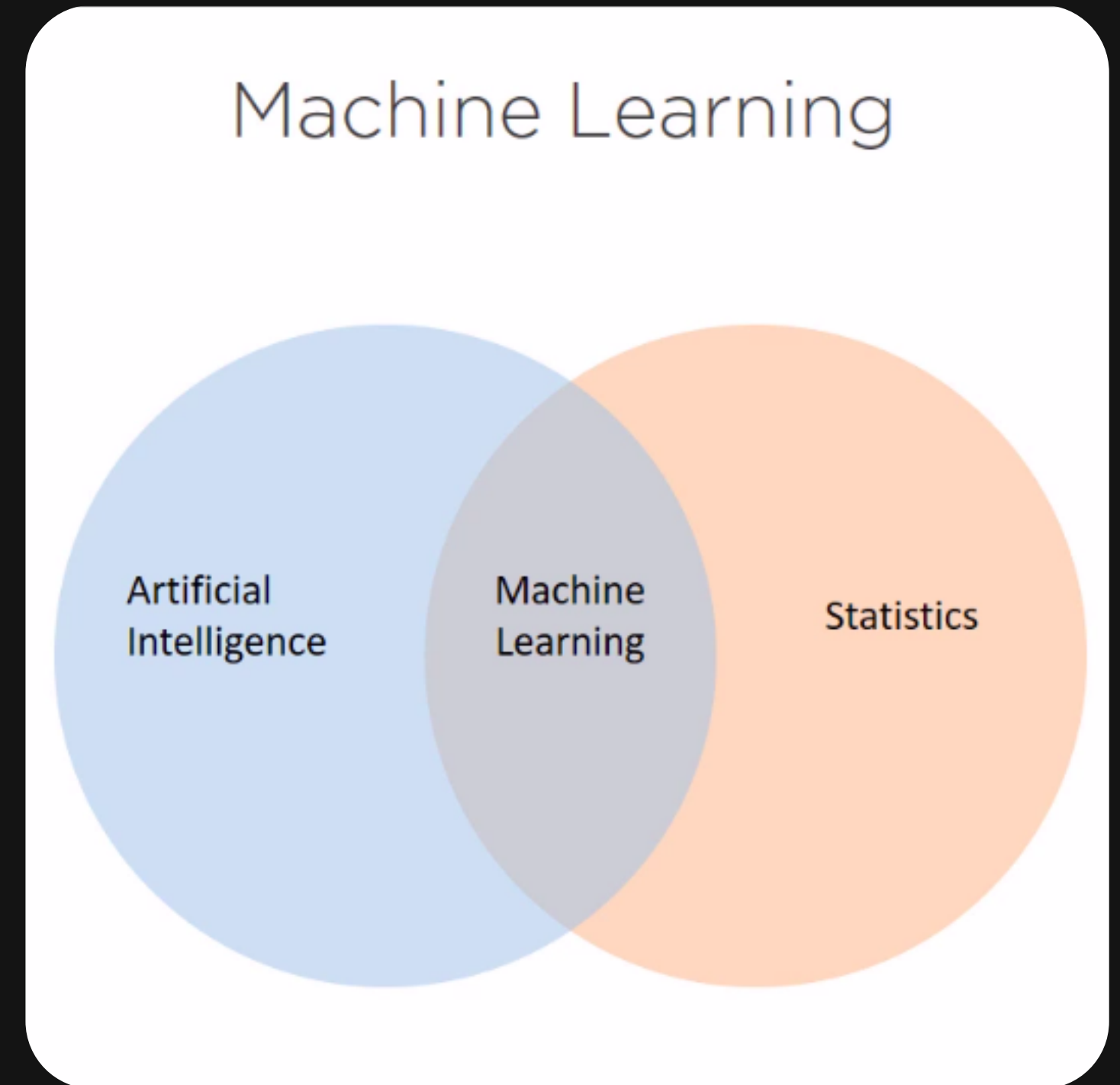


Deep Learning

Extract Pattern from Data using neural networks.

Machine Learning

Machine learning is a type of artificial intelligence where we teach machines how to solve problems without explicitly programming them to do so.



Types of Machine Learning

1

**Supervised
Learning**

2

**Unsupervised
Learning**

3

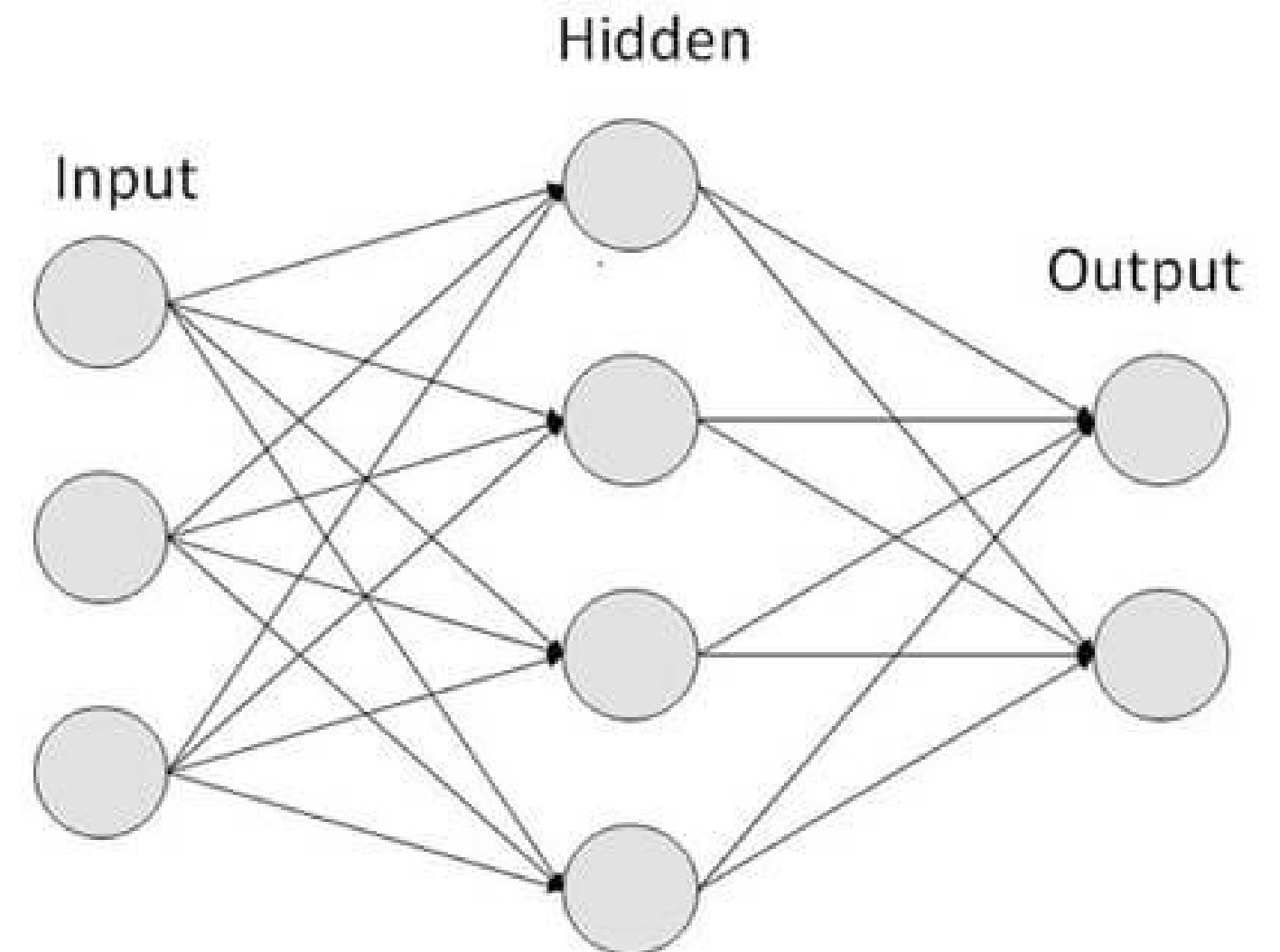
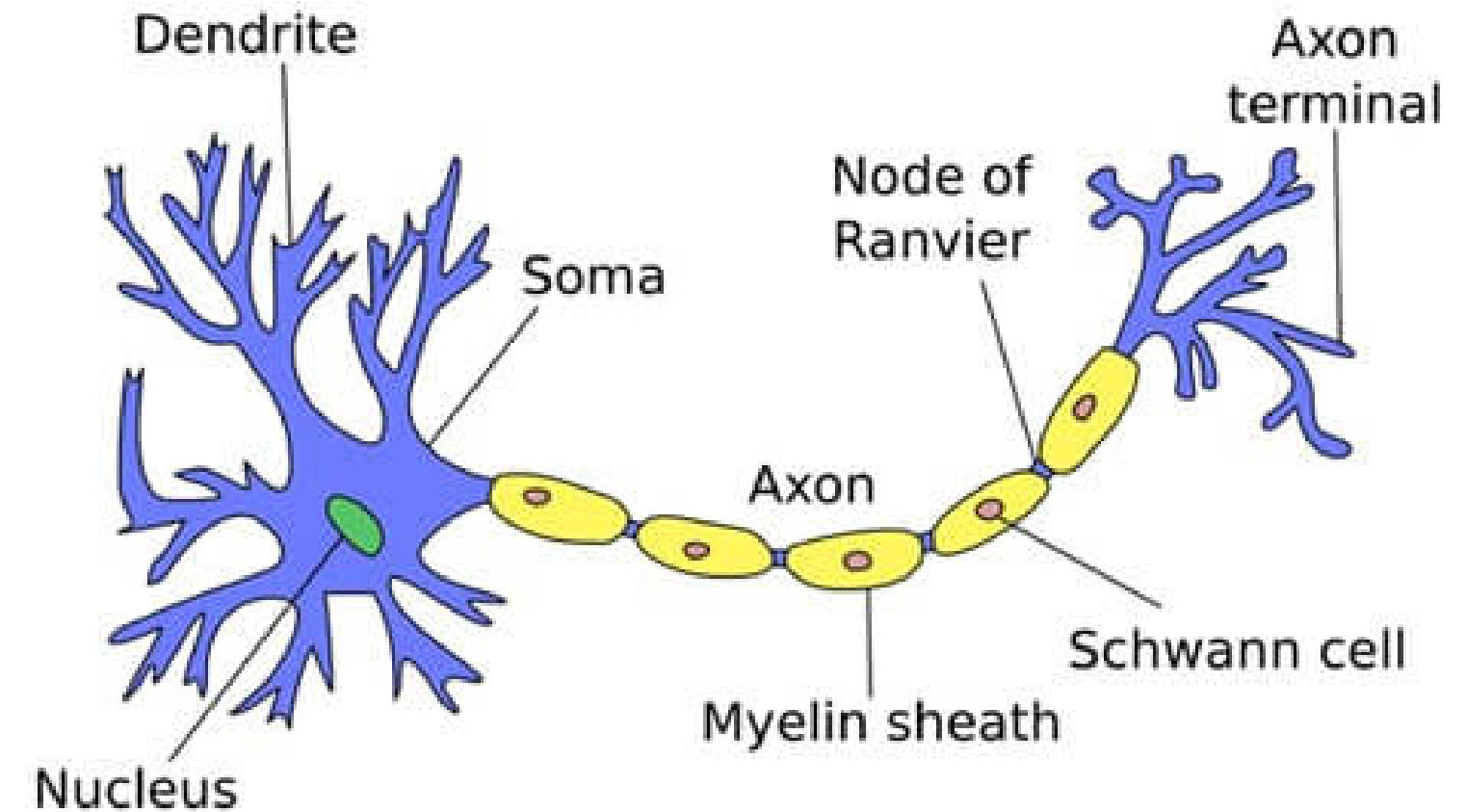
**Reinforcement
Learning**

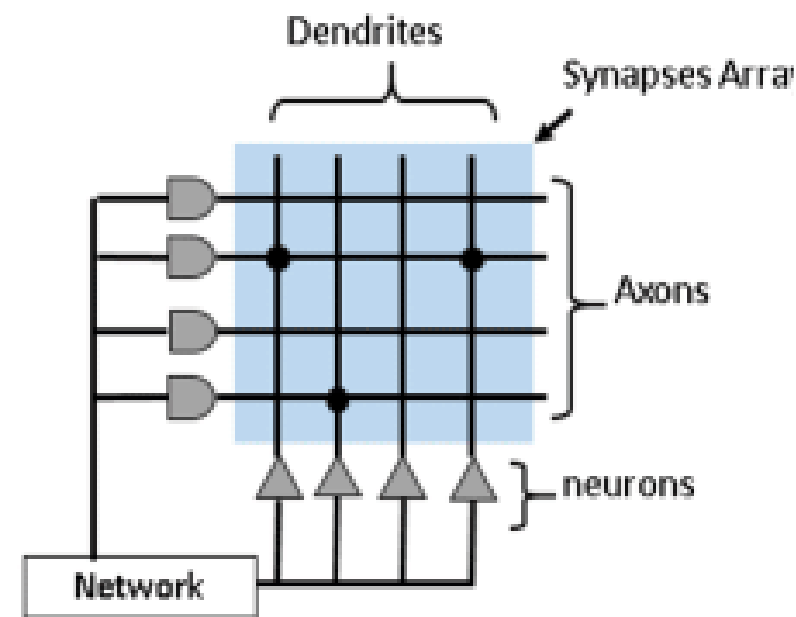
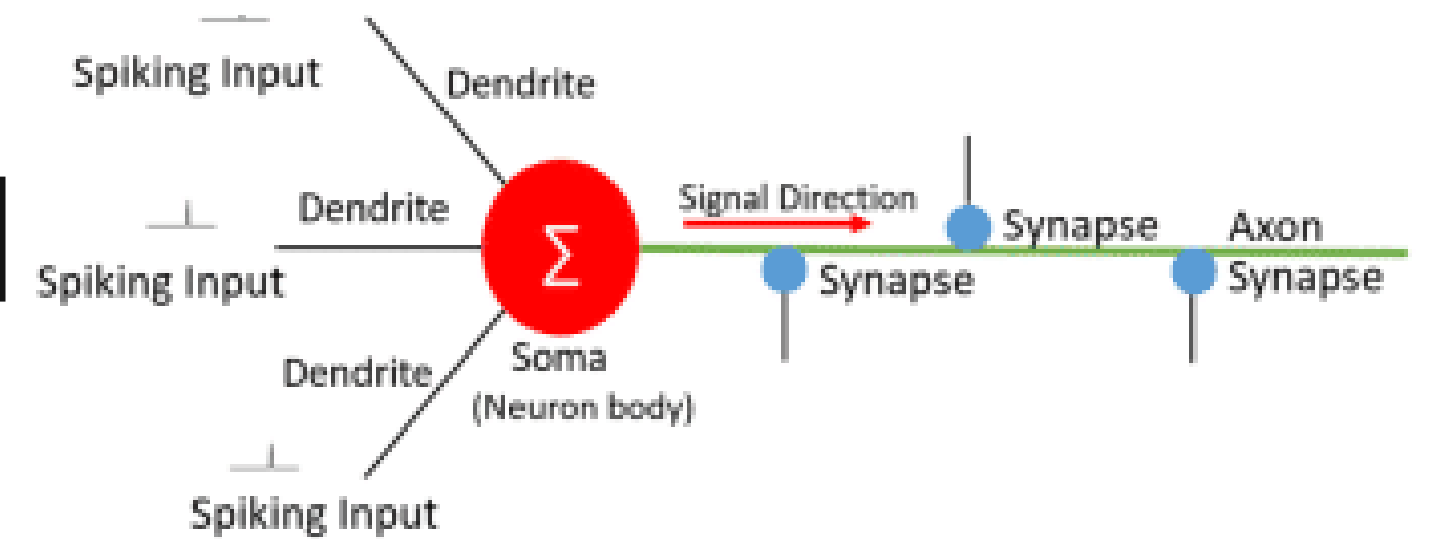
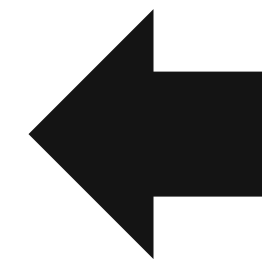
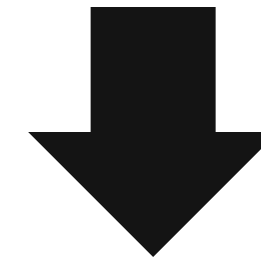
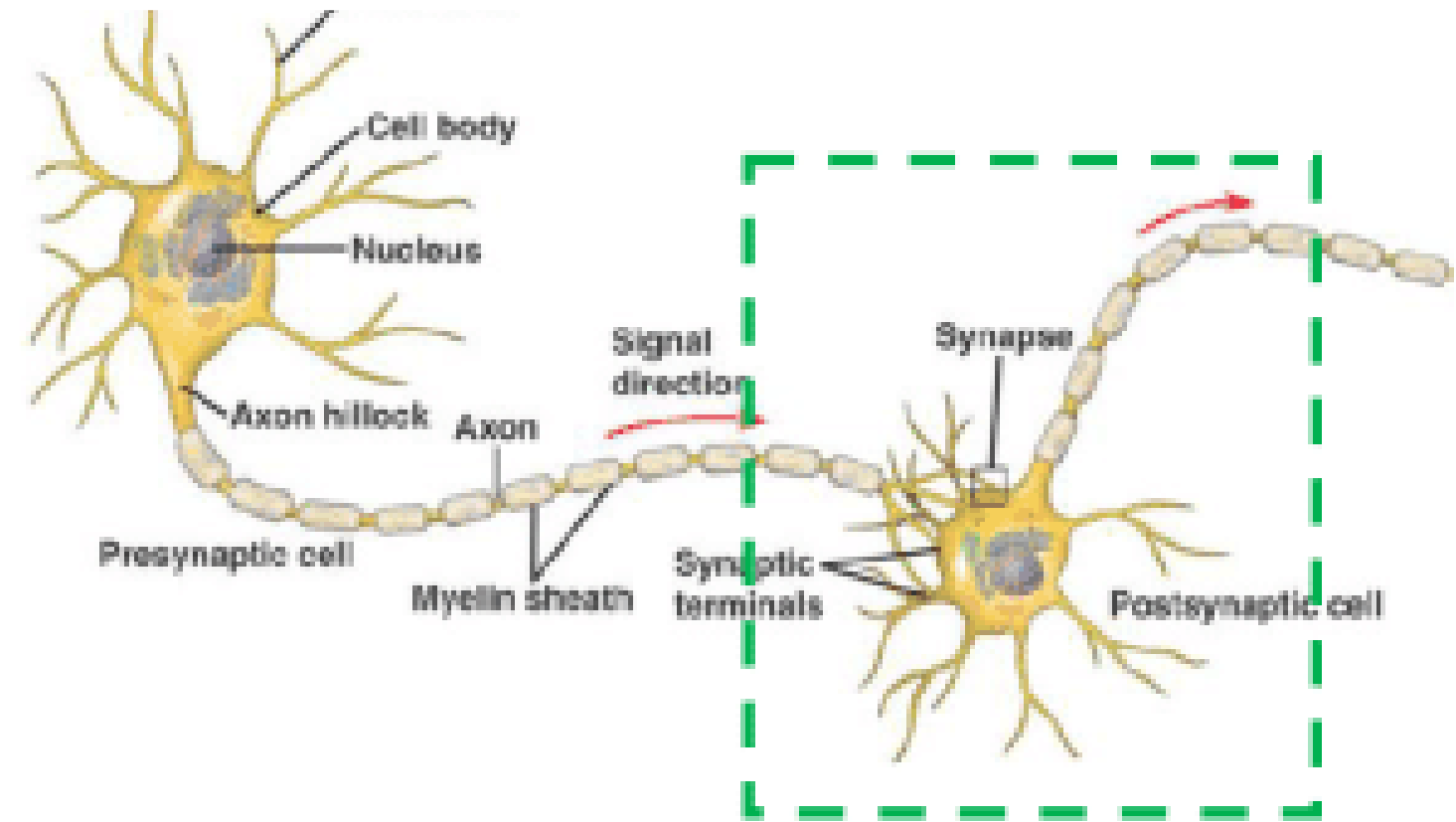
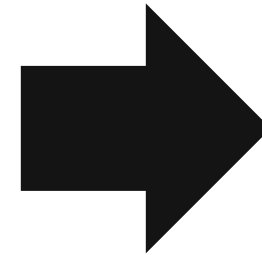
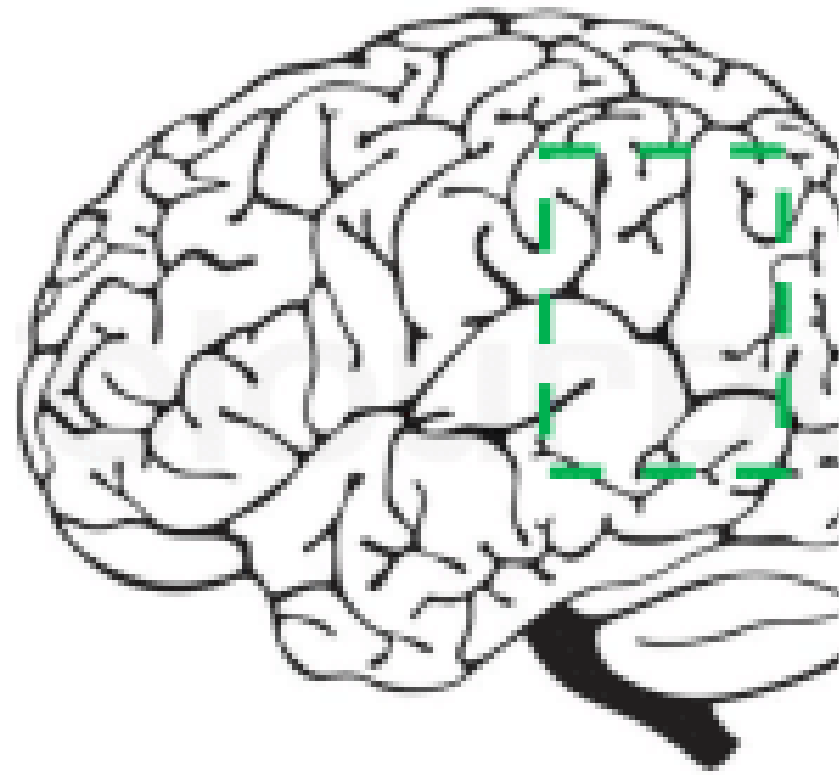
Neural Networks

Also known as artificial neural networks (ANNs) or simulated neural networks (SNNs),

are a subset of machine learning and are at the heart of deep learning algorithms.

Their name and structure are inspired by the human brain, mimicking the way that biological neurons signal to one another.

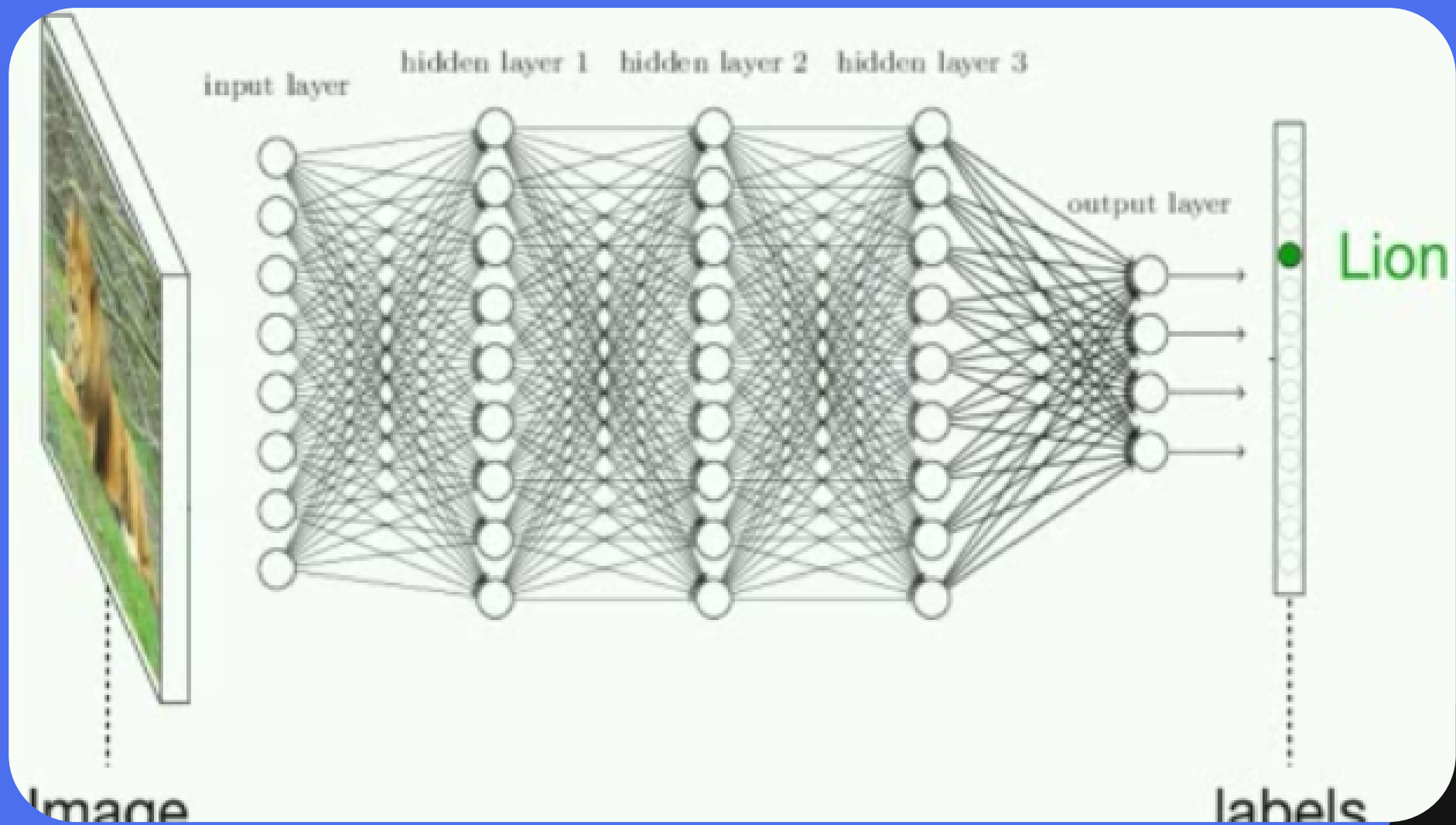




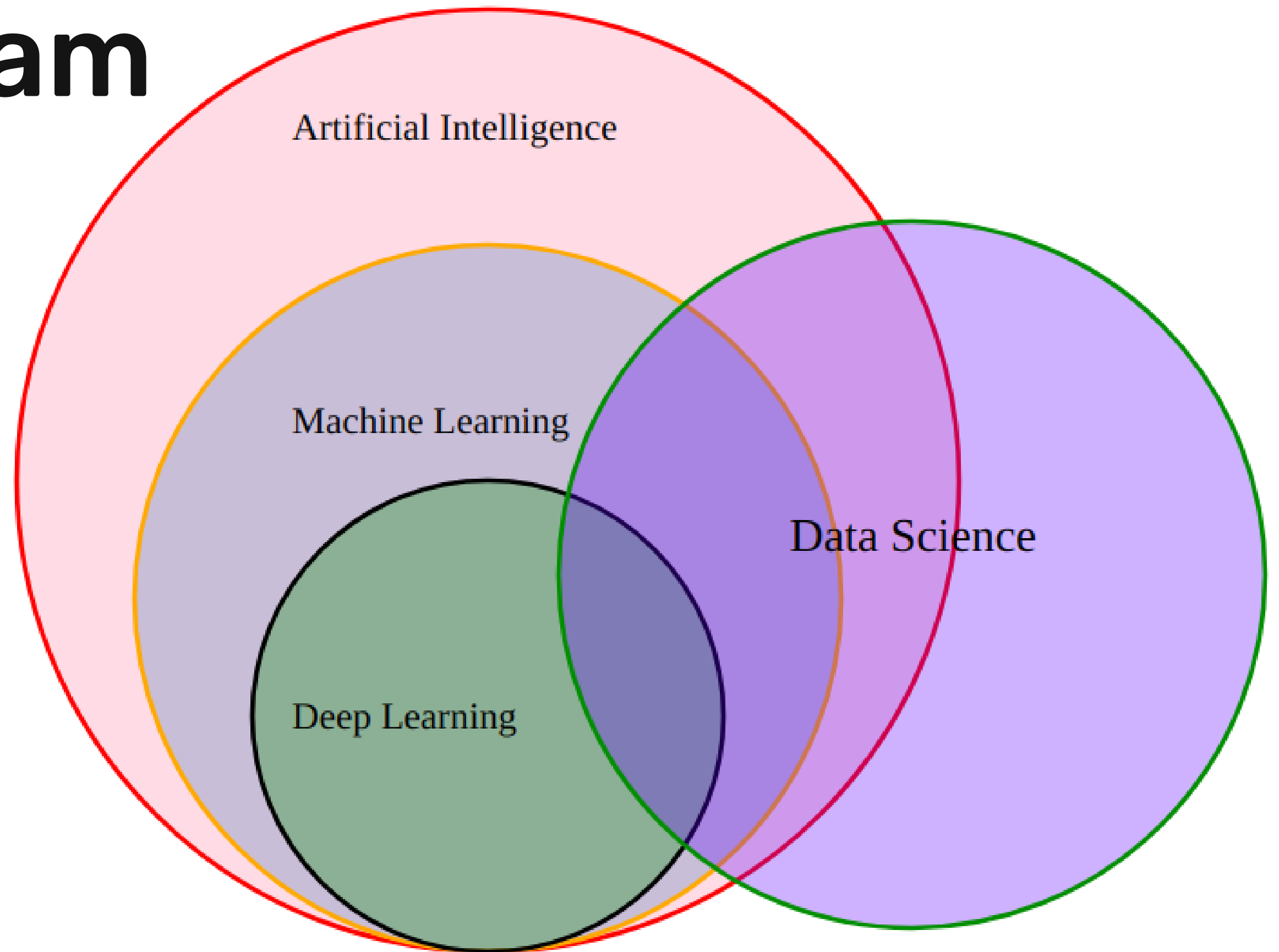
Neural Network Flow

Deep Learning

It imitates the way humans gain certain types of knowledge



Understanding Through Venn Diagram



Quick Question

**What is the use of
Matrix
from Linear Algebra
in real life?**



Applications of Artificial Intelligence

01

This Person does not exist

<https://this-person-does-not-exist.com/en>

02

Digital Einstein

<https://digitalhumans.com/digital-einstein/>

<https://www.youtube.com/watch?v=RiWB2o-9qMs&t=13s>

What does a Tesla Car See



Applications of Artificial Intelligence

With Live Games

01

Akinator

<https://en.akinator.com/game>

02

For NLP

<https://research.google.com/semantris/>

Applications of Artificial Intelligence

With Live Games

03

Quick Draw by Google

<https://quickdraw.withgoogle.com/>

04

Talk to books

<https://books.google.com/>

Who is using this technology?

Well-known platforms use AI, you also
encountered these features.



Social Networks

Real-time AI applications



Pinterest
uses computer vision
automatically identify objects in
images (or “pins”)

<https://in.pinterest.com/pin/689824867919734200/>



Instagram
uses machine learning to
identify the contextual meaning
of emoji.

which have been steadily replacing
slang (for instance, a laughing emoji
could replace “lol”)

Snapchat



This technology is powered by the 2015 acquisition of Lookery, a Ukrainian company with patents on using machine learning to track movements in the video.

see magic
WORLD WHERE...



you can be
ANYONE...



do & see
ANYTHING...



have fun
WITHOUT LIMITS...



Different Profiles to work in the field of Artificial Intelligence

- Machine Learning Engineer
- Deep Learning Engineer
- NLP Engineer
- Computer Vision Engineer
- Data Scientist
- Data Engineer
- Data Visualization Expert
- ML Ops Engineer
- Data Architect
- And many more

How to Start Learning?

You can start from here:

<https://github.com/hemansnation/Data-Science-ML-Full-Stack-2022>



Thank You

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