

# Artificial Intelligence &

# Machine Learning

A walkthrough of Artificial Intelligence  
and Machine Learning Applications.

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**Himanshu Ramchandani**  
**M.Tech | Data Science**



# 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?

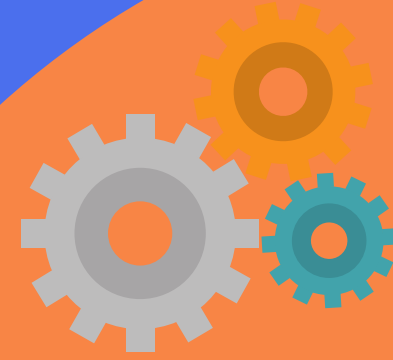
Artificial Intelligence is a field of computer science that attempts to create machines that act rationally in response to their environment.





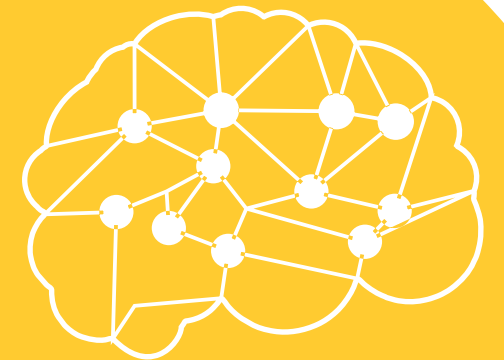
# Artificial Intelligence

A technique that enables a computer to mimic human behavior.



# Machine Learning

Ability to learn without explicitly being programmed.

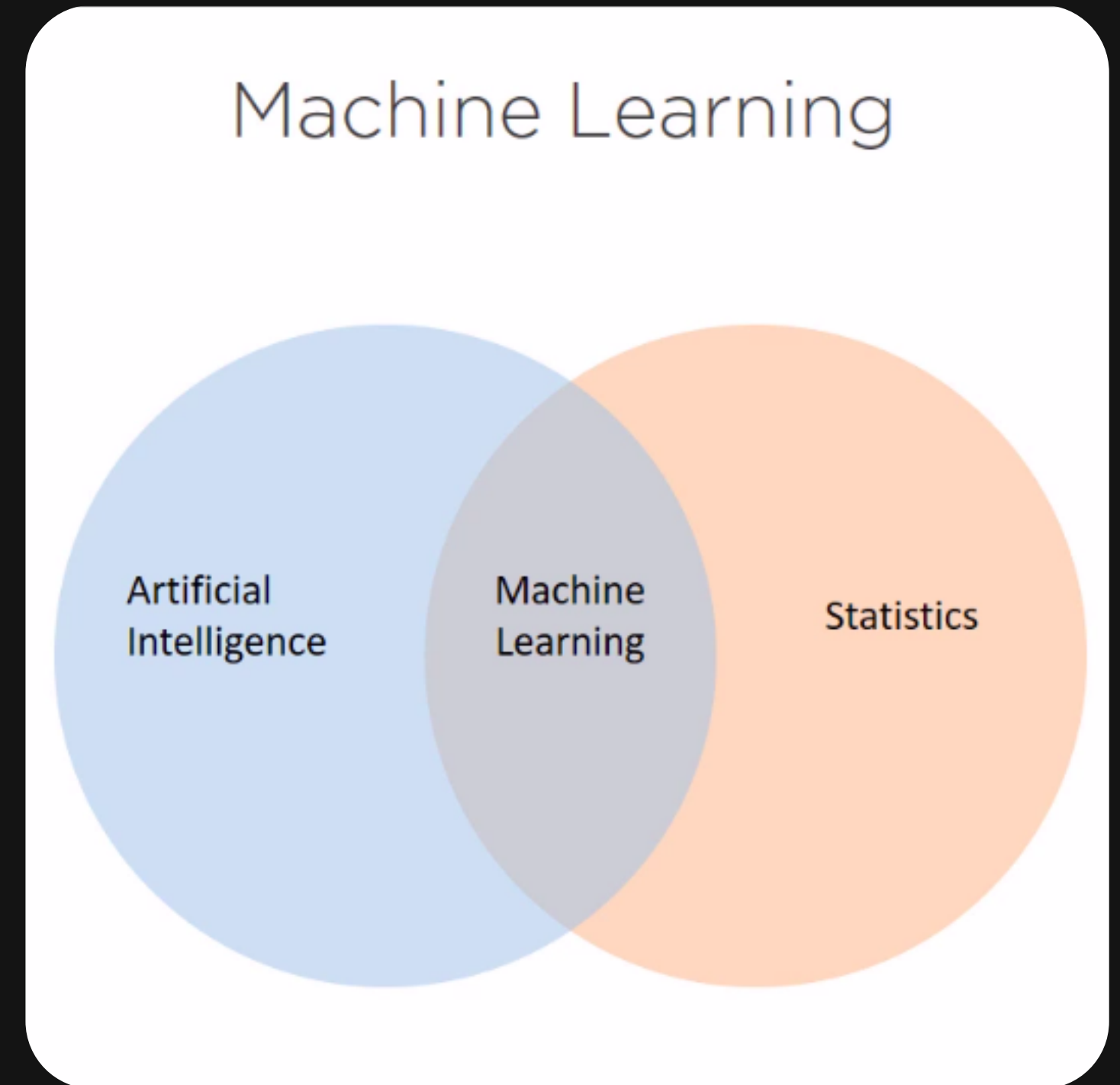


# Deep Learning

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

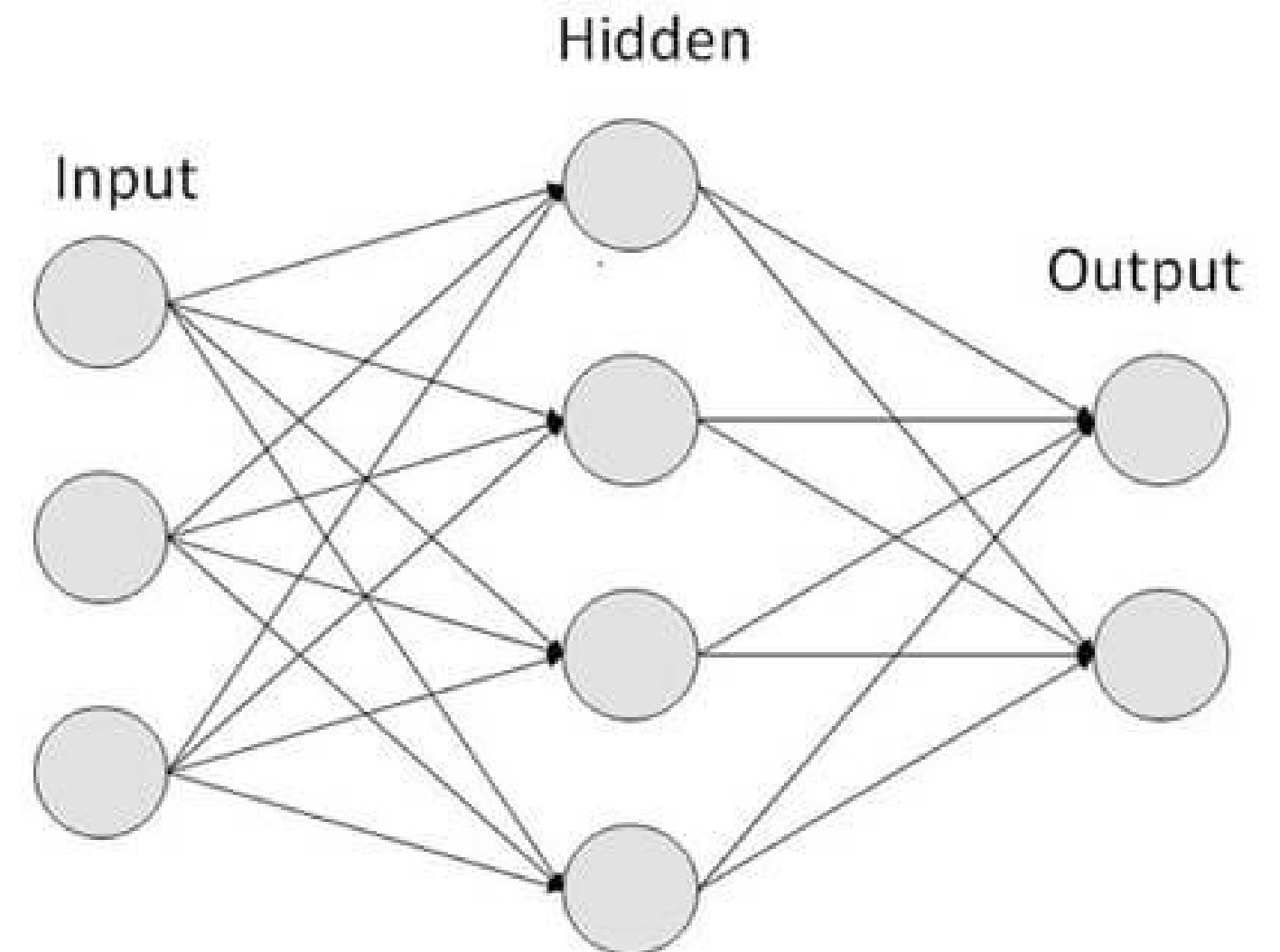
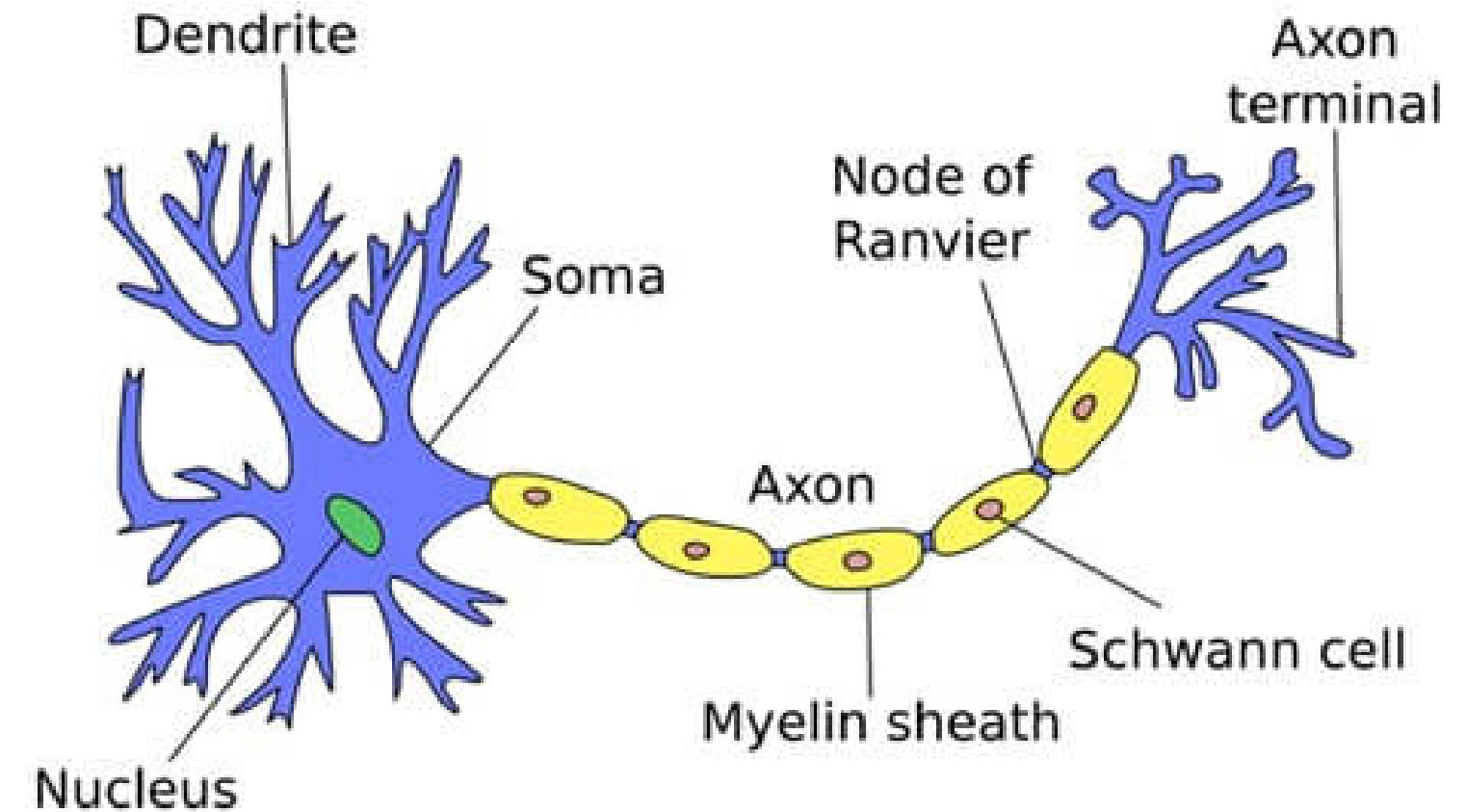
**Reinforcement  
Learning**

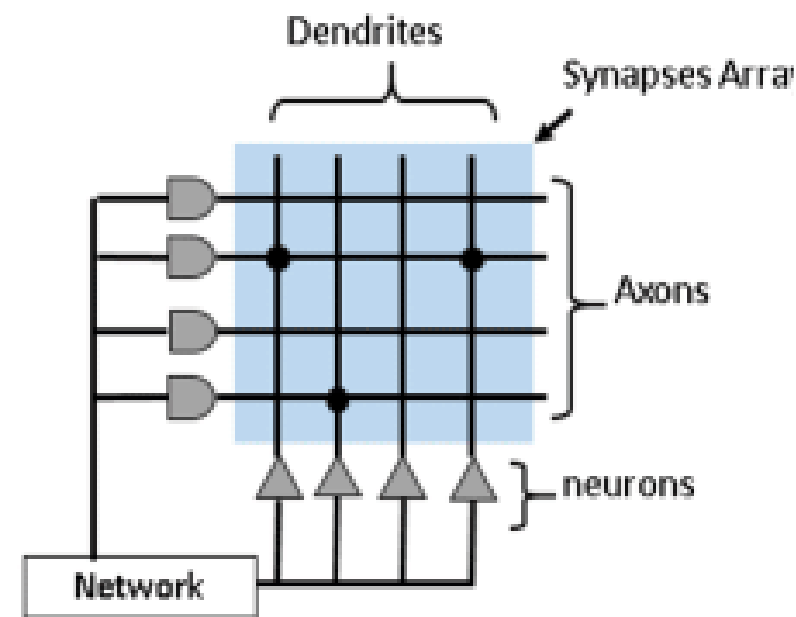
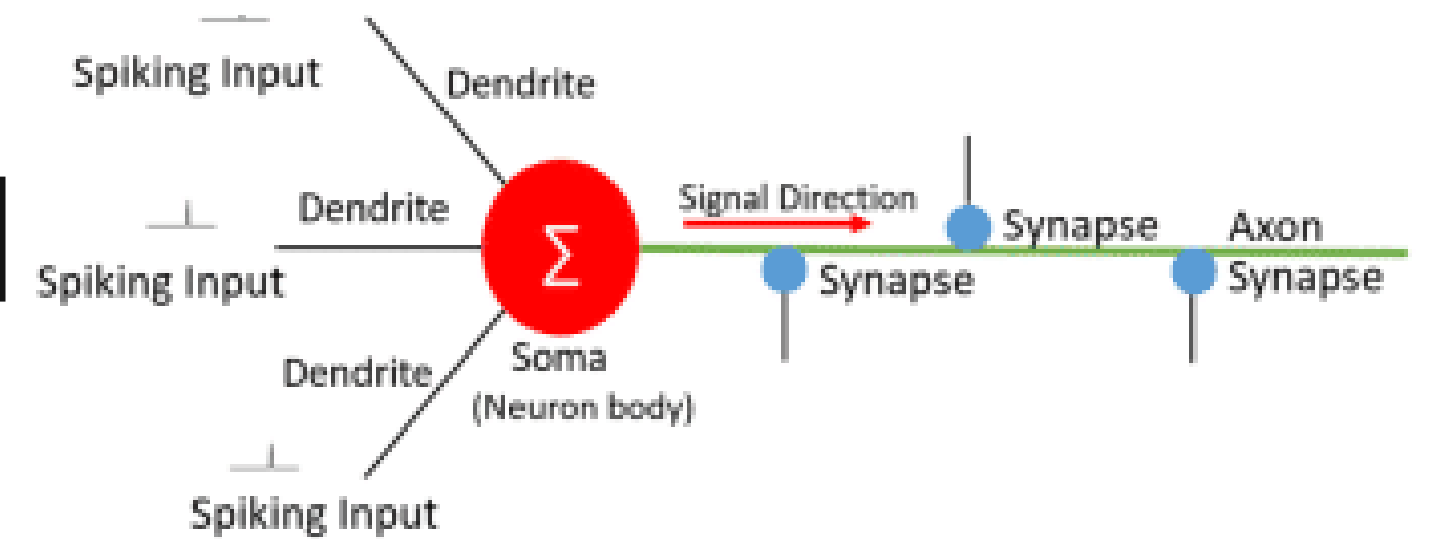
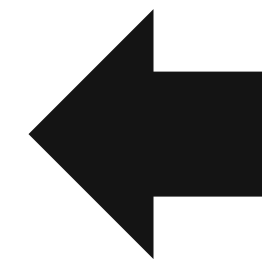
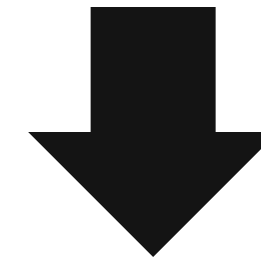
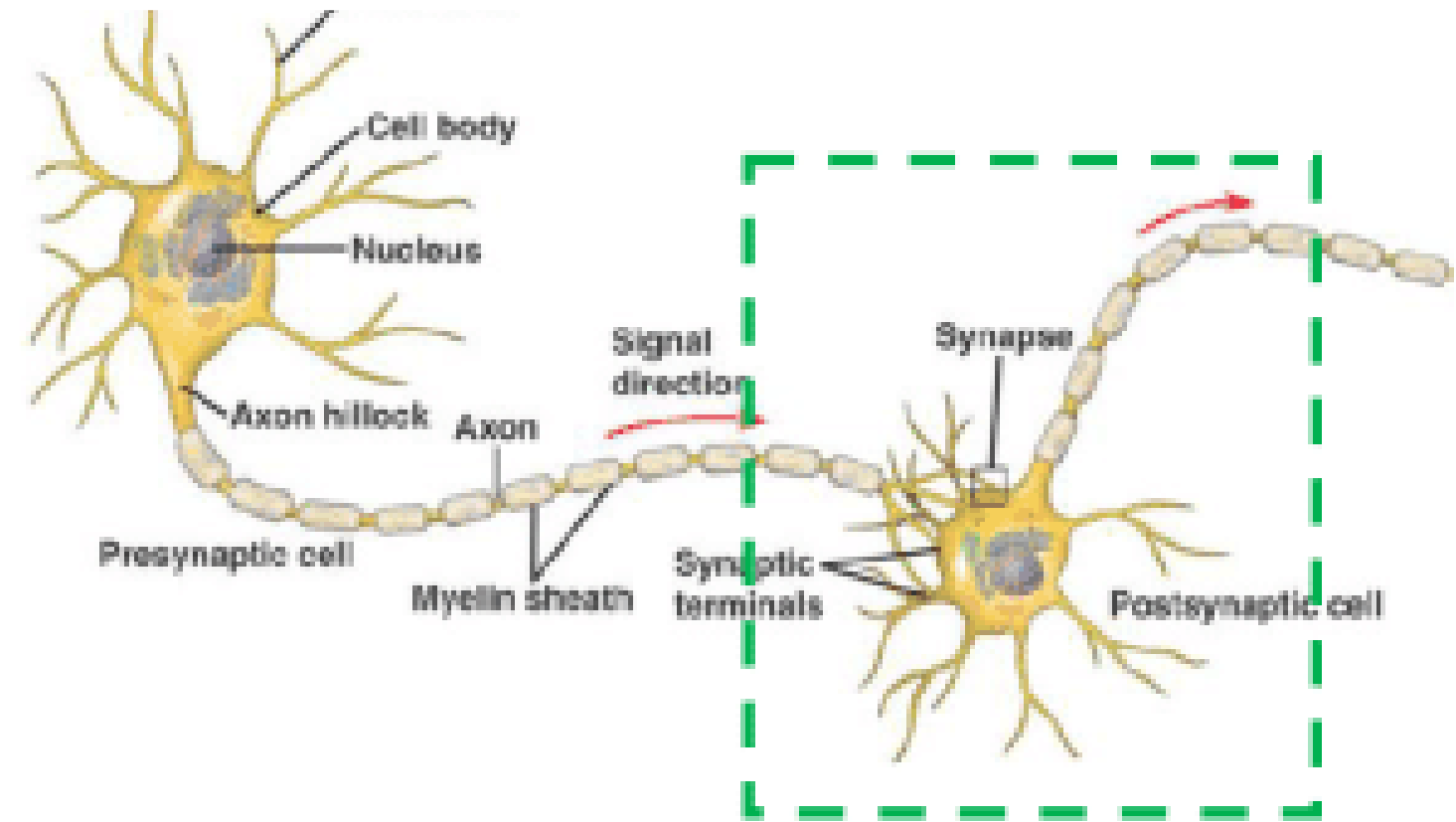
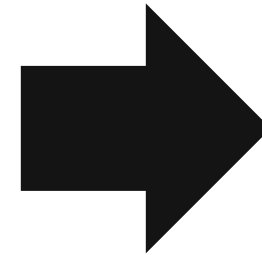
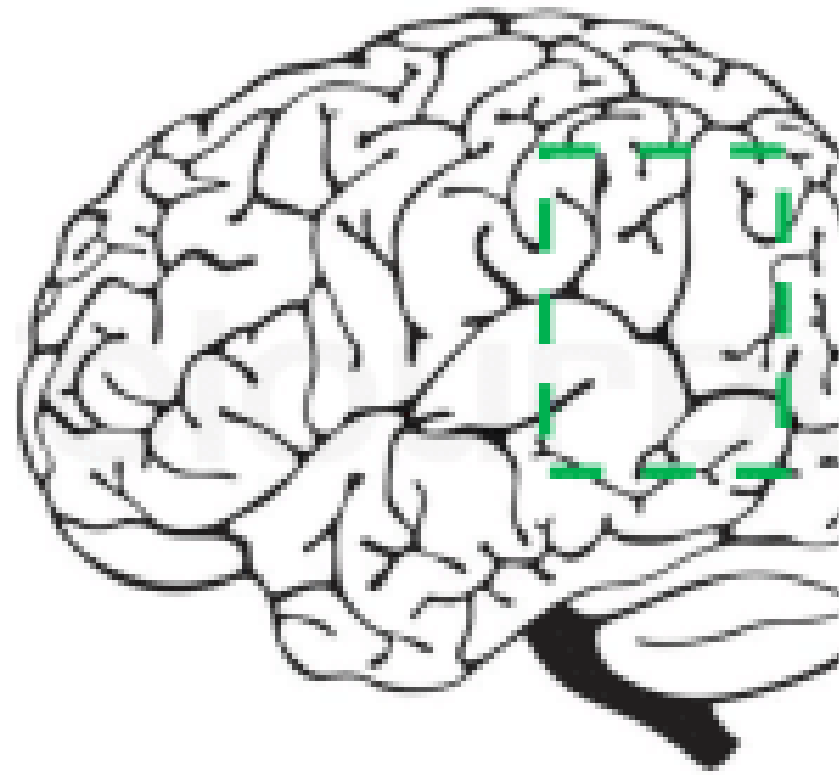
# Neural Networks

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.



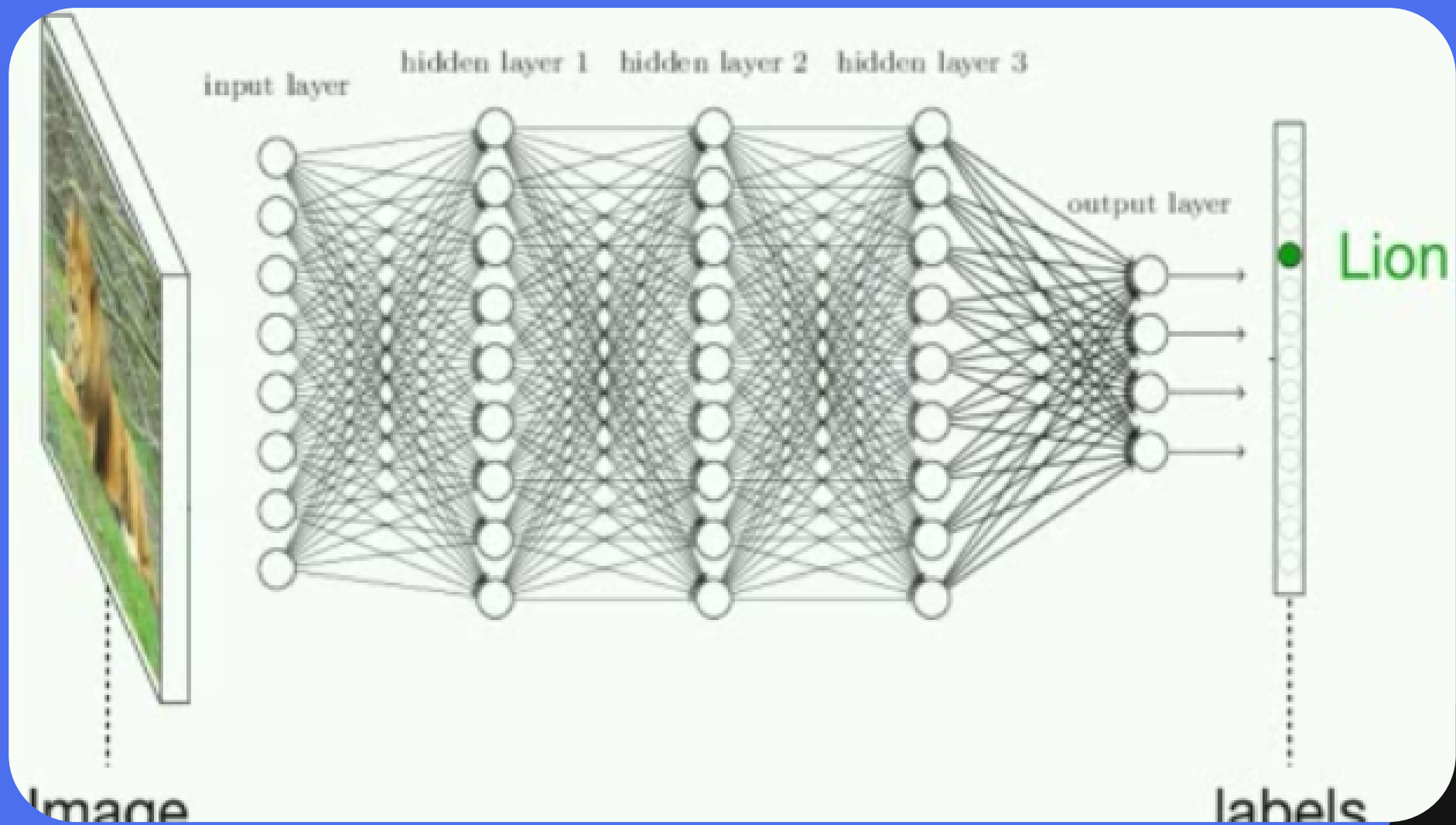


# Neural Network Flow

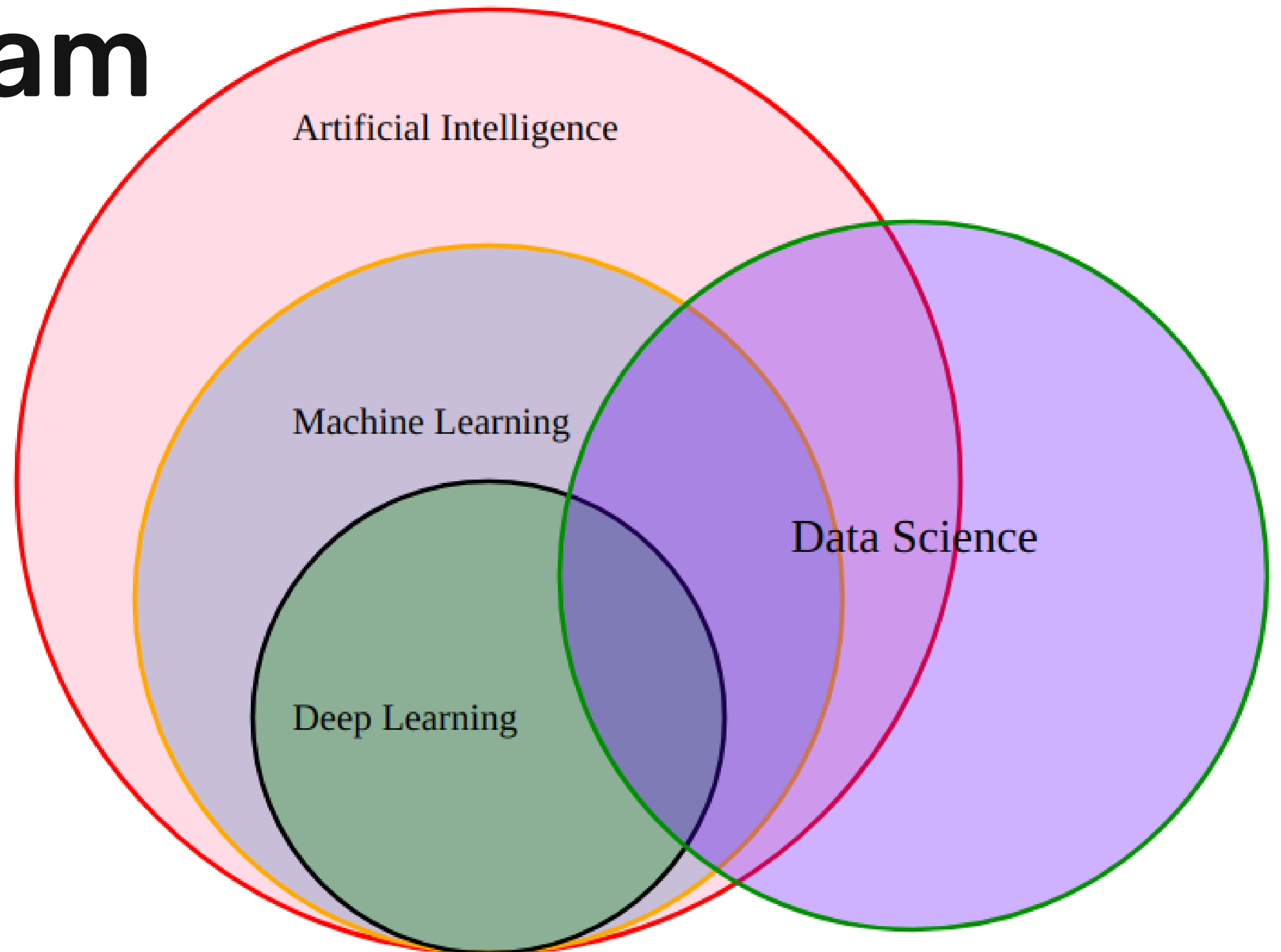


# Deep Learning

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

Created and Presented By



**Himanshu Ramchandani**

M.Tech | Data Science