Artificial Intelligence & Machine Learning

A walkthrough of Artificial Intelligence and Machine Learning Applications.

Agenda

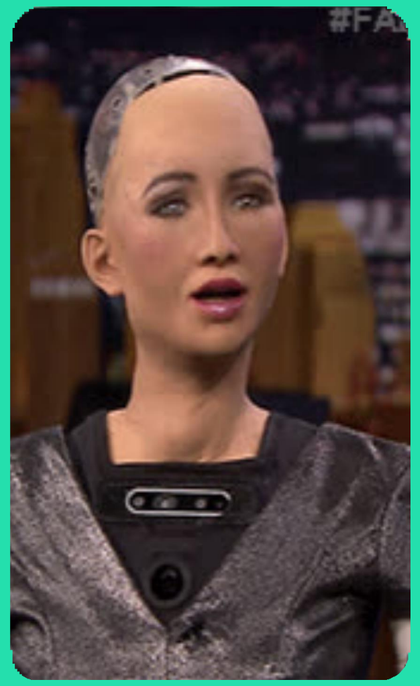
What we'll discuss today

01 What 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.

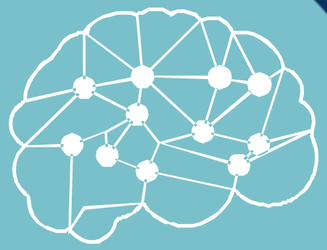


Artificial Intelligence

A technique that enables a computer to mimic human behavior.

Machine Learning

Ability to learn without explicitly being programmed.

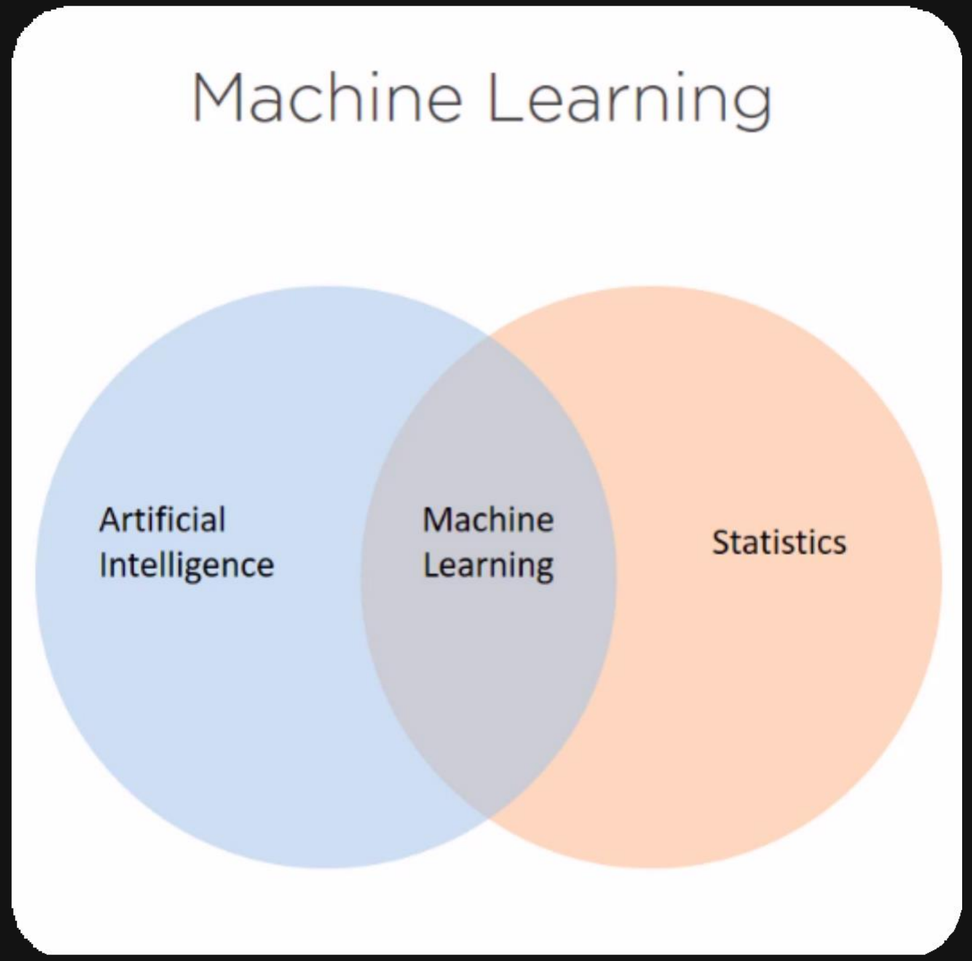


Deep Learning

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

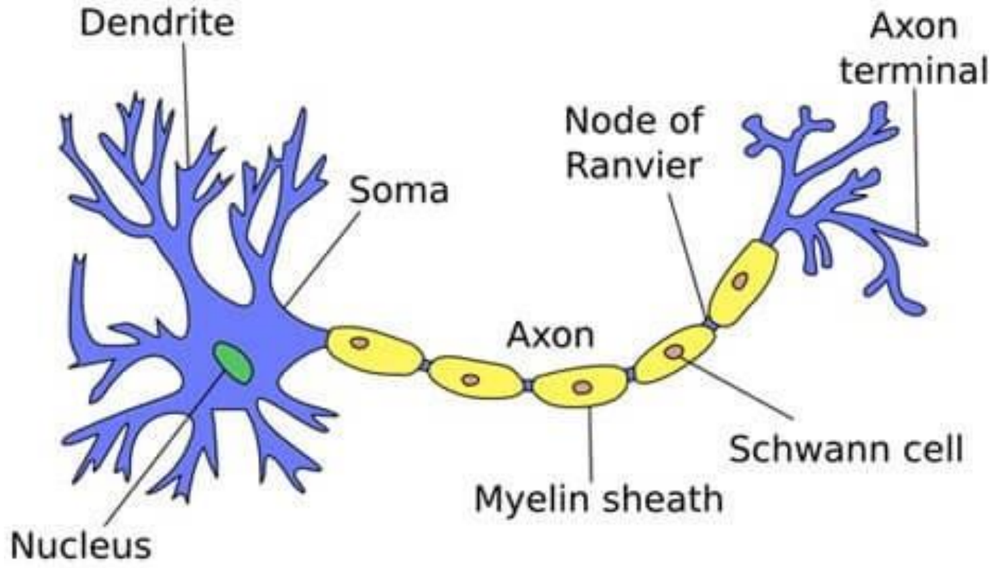
Reinforcement Learning

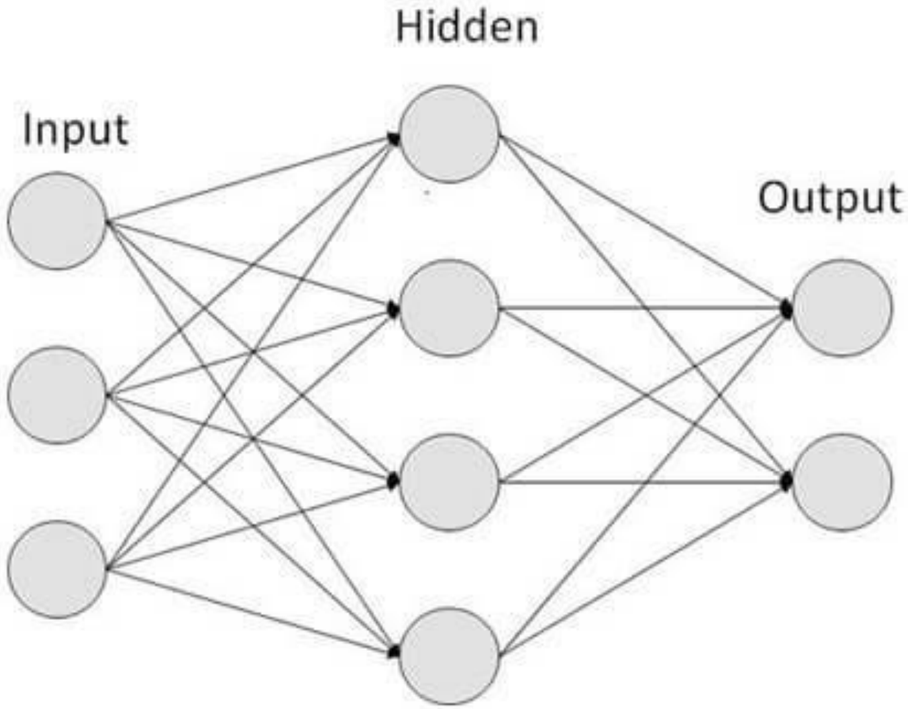
Neural Networks

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

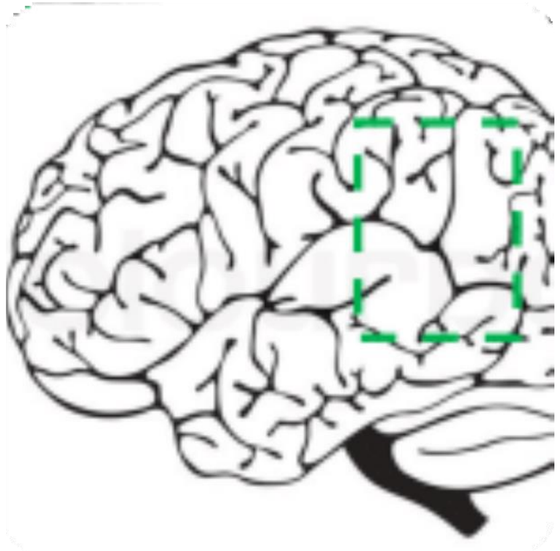
are a subset of machine learning and are at the heart of deep learning algorithms.

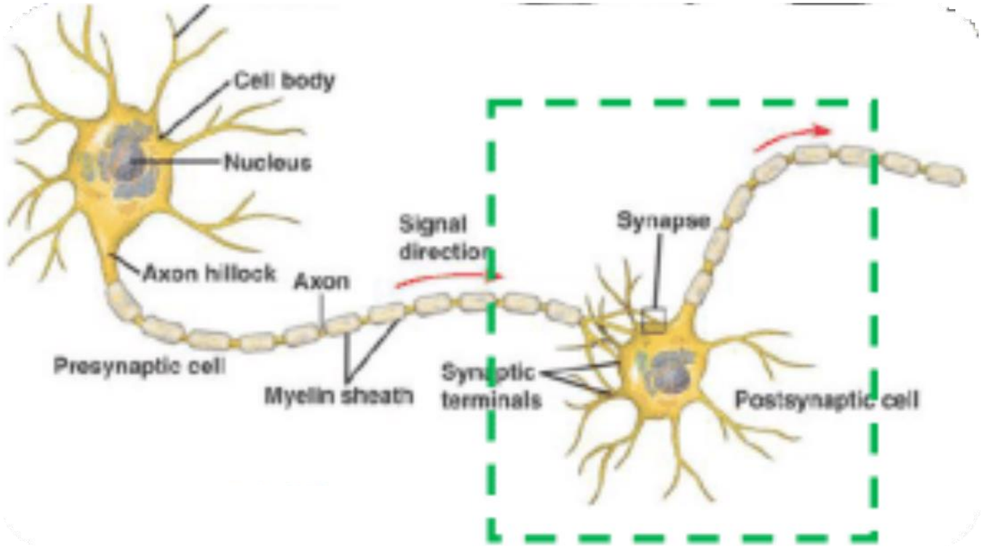
Their name and structure are inspired by the human brain, mimicking the way that biological neurons signal to one another.

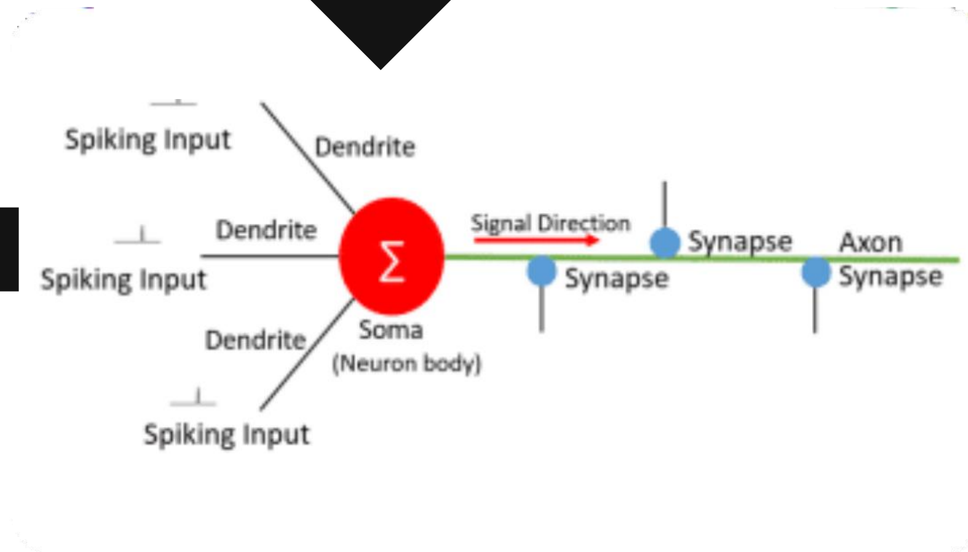


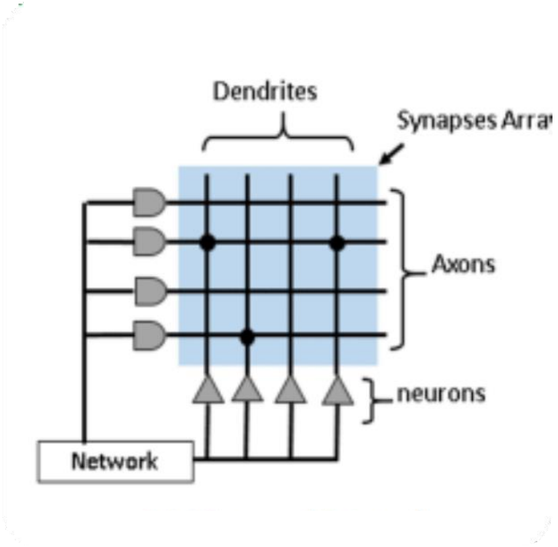


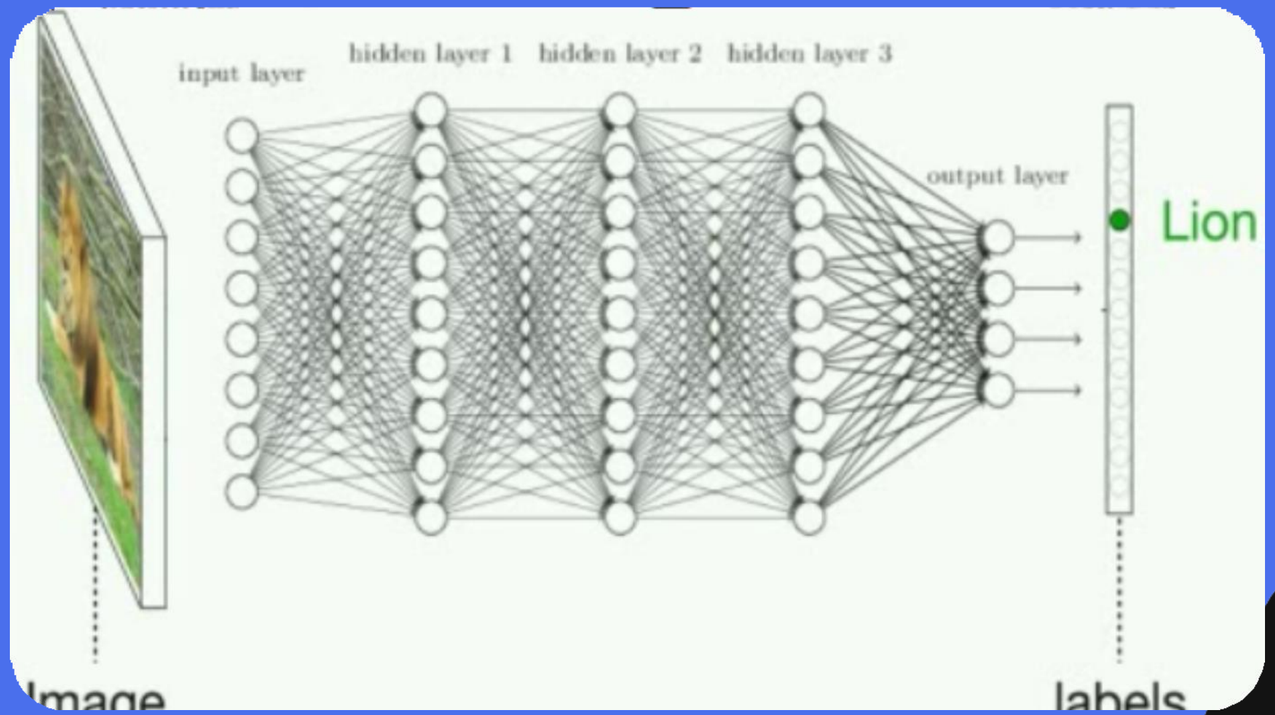
Neural Network Flow







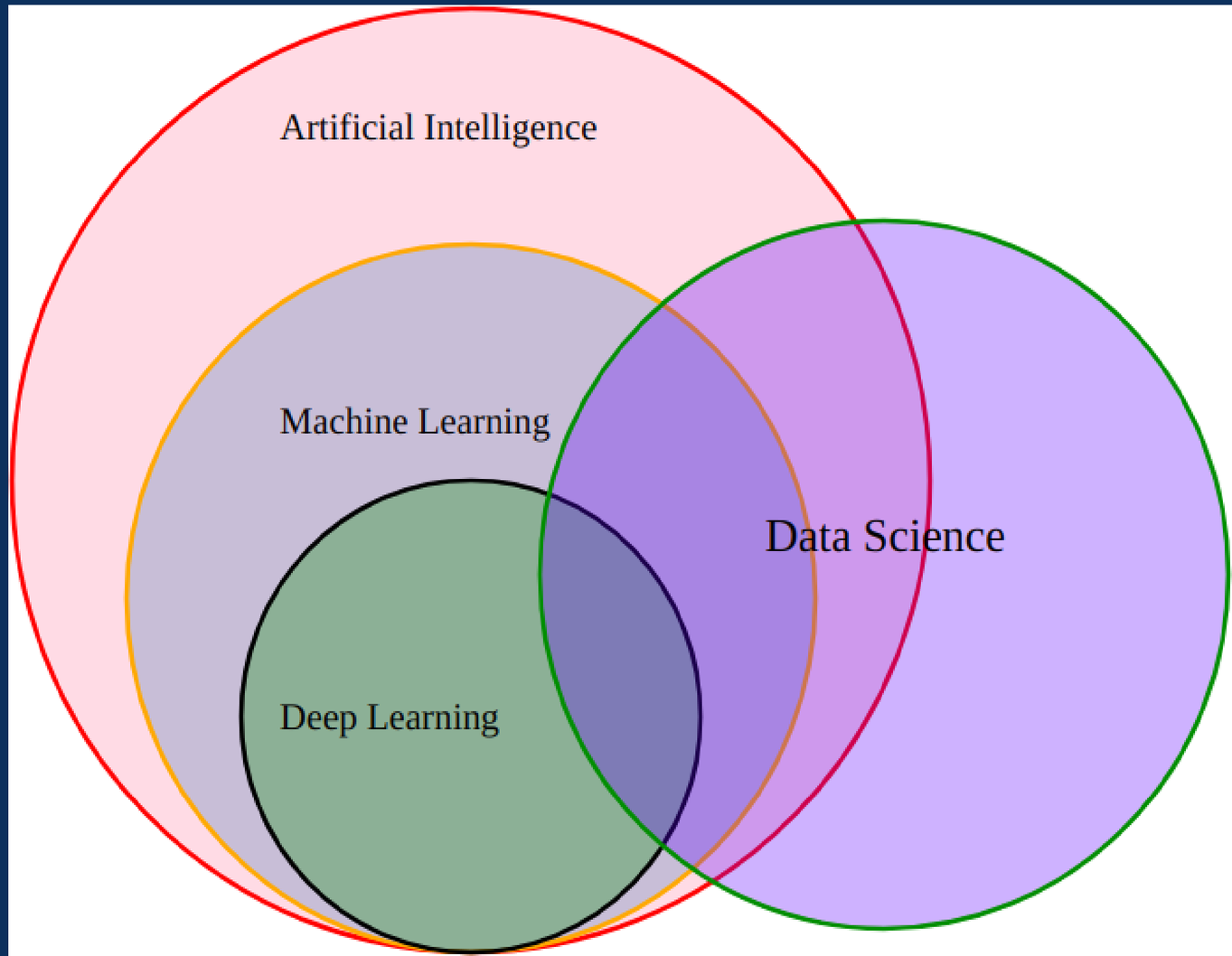




Deep Learning

It imitates the way humans gain certain types of knowledge

Understanding Through Venn Diagram



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 Looksery, a Ukrainian company with patents on using machine learning to track movements in the video.

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

Thank You