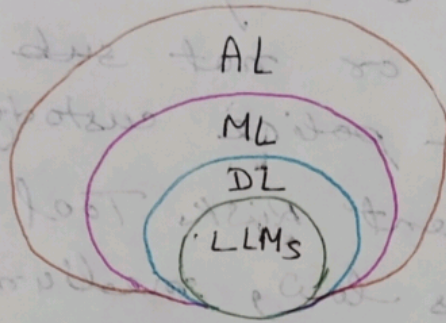


Forward Indexing

0 1 2 3 4 5 6 7 8 9 10
P R I N A S I N G H
-11 -10 -9 -8 -7 -6 -5 -4 -3 -2 -1

Backward Indexing



Artificial Intelligence Umbrella term but also used in basic AI applications such as.

- ⊙ robot programming
- ⊙ search algorithms
- ⊙ Boolean logic
- ⊙ other applications.

Machine Learning

AI subset.

- ⊙ Anomaly detection as in fraud prevention.
- ⊙ Predictive analytics as in forecasting.

Deep Learning

ML subset.

- ⊙ Image recognition.
- ⊙ Speech to text.
- ⊙ Identify molecular structure in drug research.

Large Language Models (LLMs)

⊙ chat GPT, BERT, IS

⊙ Trained on enormous ~~database~~ datasets.

Data Science Applications

University of Nottingham Researchers created a Data Science System that scanned routine medical data to predict which patients would have strokes or heart attacks within 10 years.

Finding Criminals.

Police in Durham, UK are slated to roll out an AI system designed to help the authorities determine whether or not a suspect should be kept in police custody.

The Harm Assessment Risk Tool (HART) will classify suspects as low, medium or high risk offenders.

© Rajsathan Police using the tool.

HR Analytics

- Companies use models to predict the productivity of the new employee based on the past data.
- Companies can select 50 employees among 900 resumes with assistance of Data Science.

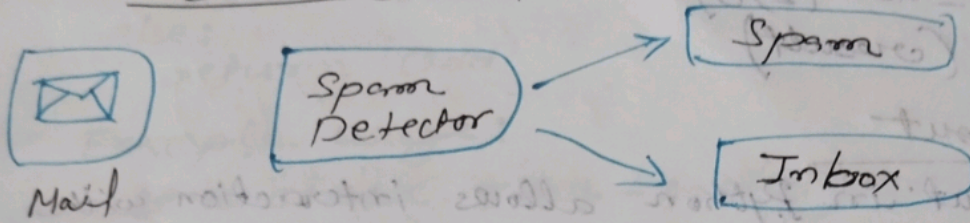
Fraud Detection

- Data Science is getting better and better at spotting potential cases of fraud across many different fields.
- For example, PayPal is using machine learning to fight money laundering. The company has tools that compare millions of transactions and can precisely

distinguish between legitimate and fraudulent transactions between buyers and sellers.

AI in GST

Email Classification



Application

- ① Web and internet development.
- ① Games.
- ① Language Development.
- ① Operating System.
- ① Image processing and Graphic design Application.
- ① Scientific and computational applications.
- ① Business application development.

Advantages

- ① Readable and Maintainable Code,
- ② Multiple programming Paradigms.

Disadvantages

- ① Speed
- ① Mobile Development
- ① Memory consumption

Function

The "print()" function in Python is a versatile tool for displaying information.

```
print('Hello Python')
```