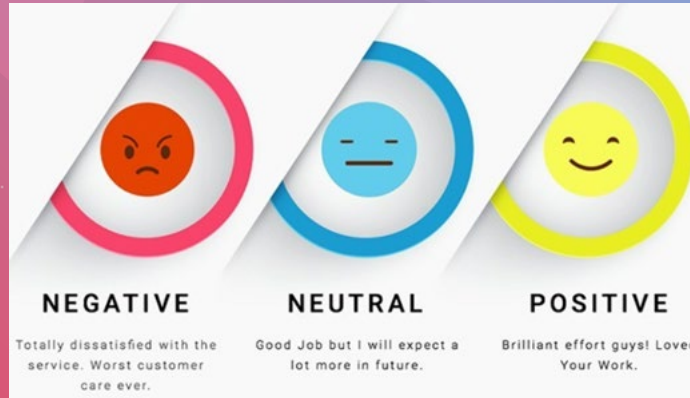


NLP : sentiment analysis



Source: <https://h2oai.github.io/tutorials/natural-language-processing-sentiment-analysis/#0>

1/DEFINITION

Sentiment analysis, also known as opinion mining, is a subfield of Natural Language Processing (NLP) that tries to identify and extract opinions from a given text.

Source: <https://h2oai.github.io/tutorials/natural-language-processing-sentiment-analysis/#0>

2/different techniques

1/using VADER model
3/ roberta pretrained model
4/



1/VADER

Valence Aware Dictionary and sEntiment Reasoner



+ Code

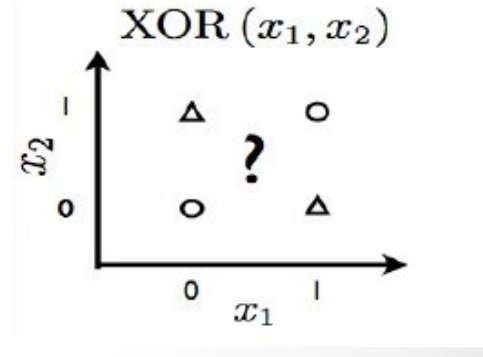
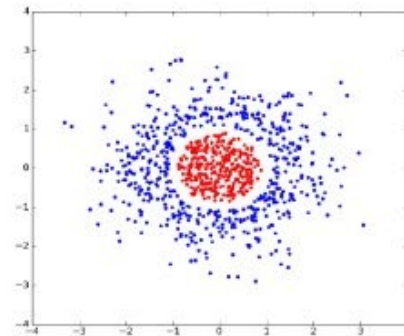
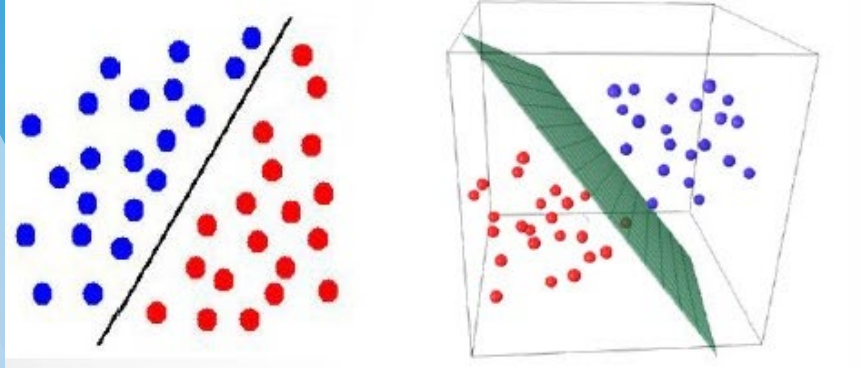
+ Markdown

```
df = pd.read_csv("../input/amazon-fine-food-reviews/Reviews.csv")  
df.head()
```

```
import nltk  
from sklearn.preprocessing import LabelEncoder  
lb = LabelEncoder()
```

Minsky and Papert (1969)

AI Winter

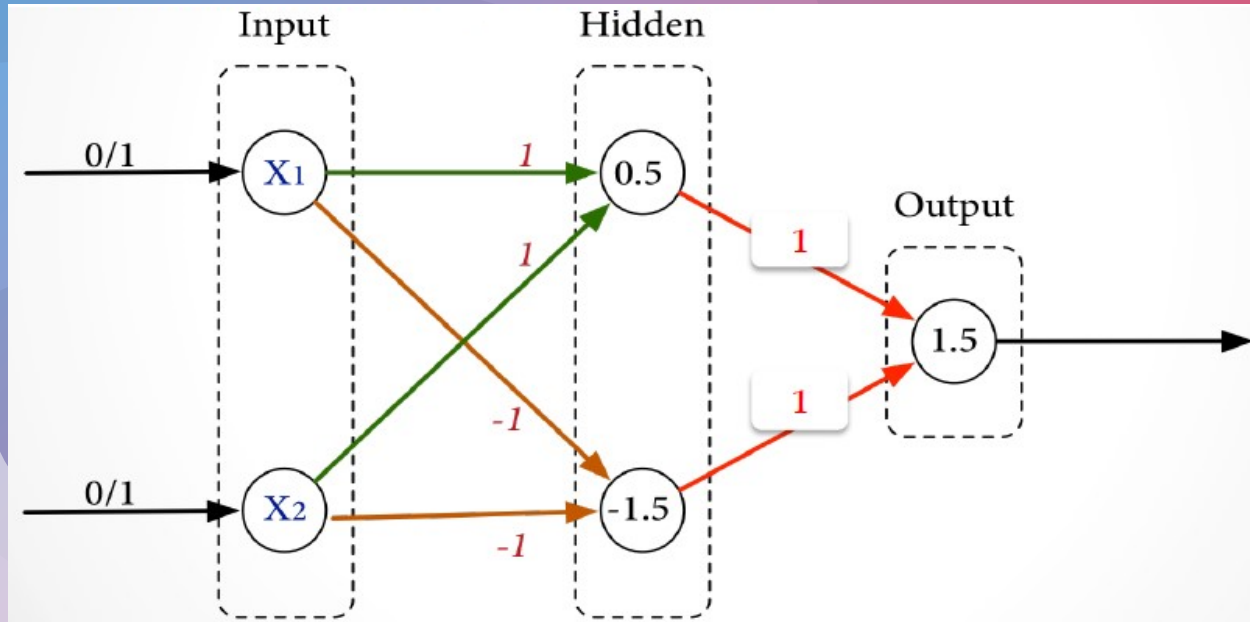


A perceptron is able to find a decision boundary (hyperplane) between linearly separable classes.

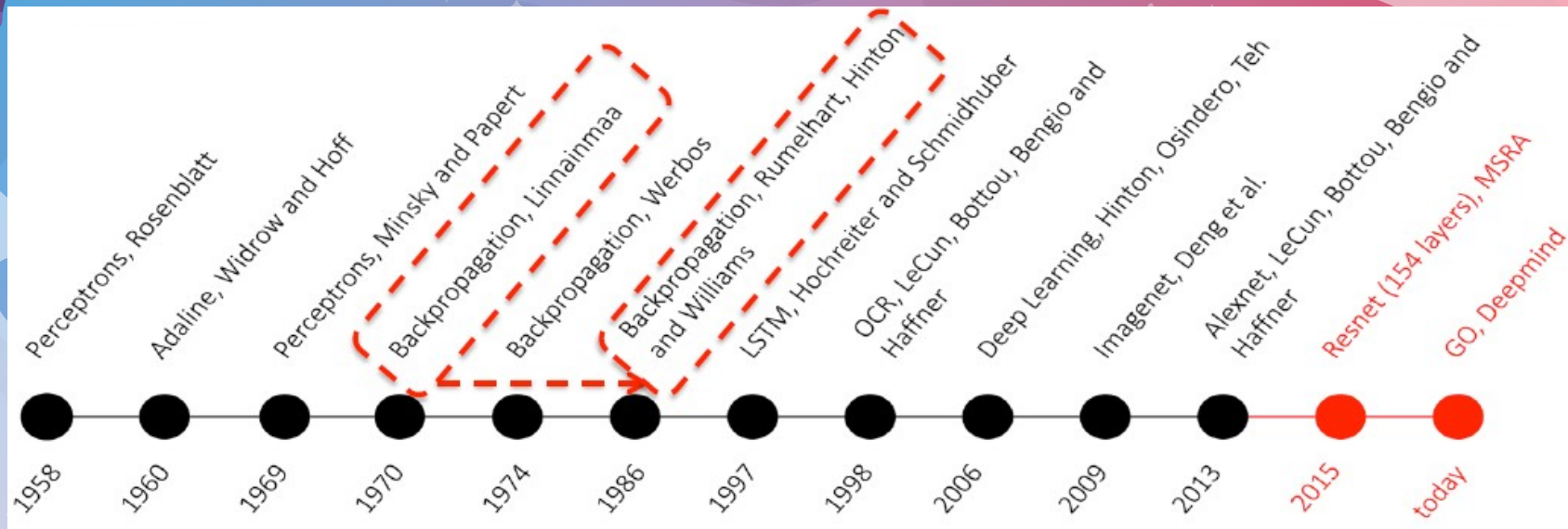
But not all problems are linearly separable.

XOR Function

Solution: Networks of perceptrons (MLP)



From AI Winter → Today





1986

David Rumelhart, Geoffrey Hinton and Ronald Williams published a paper “Learning representations by back-propagating errors”, which introduced:

- Hidden Layers
- Backpropagation and some other tricks