

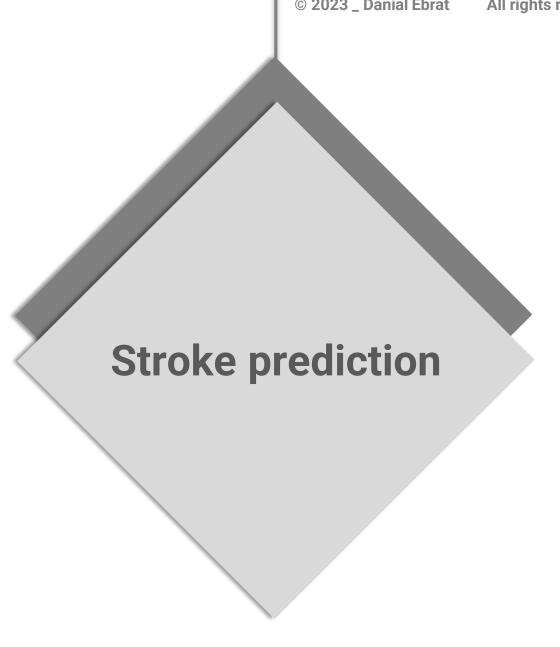


2. ML process



3. Decision Tree







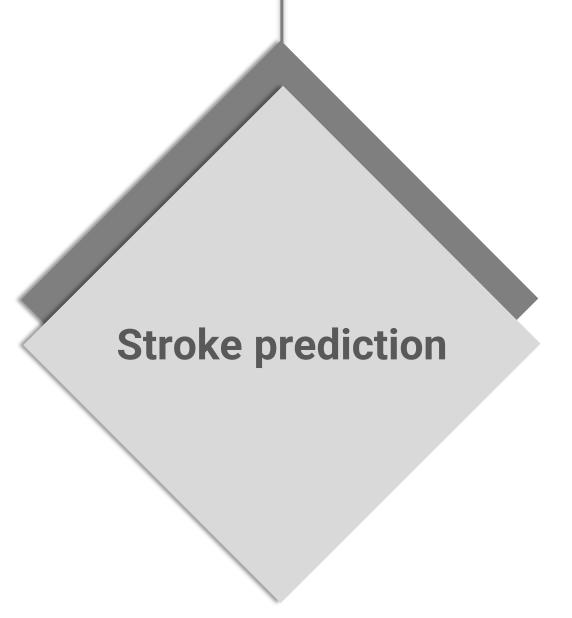


2. ML process



3. Decision Tree



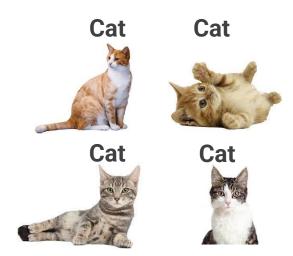




There are two types of problems that we use ML to solve:

Supervised



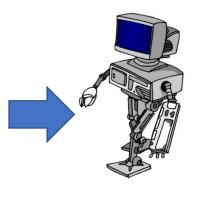












Supervised

Supervised

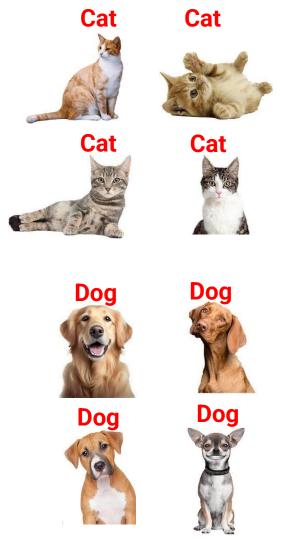
The data has label

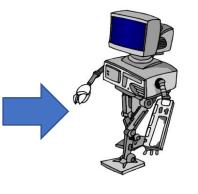
Al predicts the label and tries to classify based on its learning

In other words, it tries to Classify

Supervised learning -> Classification







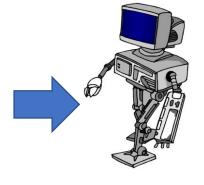


















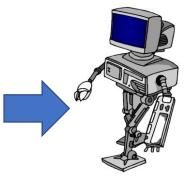








I think these are similar!



And these are similar to each other!

Unsupervised

The data has NO label

Al tries to understand the similarities and find the patterns in data. It tries to predict if the input is similar to which group (cluster)

In other words, it tries to find a cluster of similar data

Unsupervised learning -> Clustering



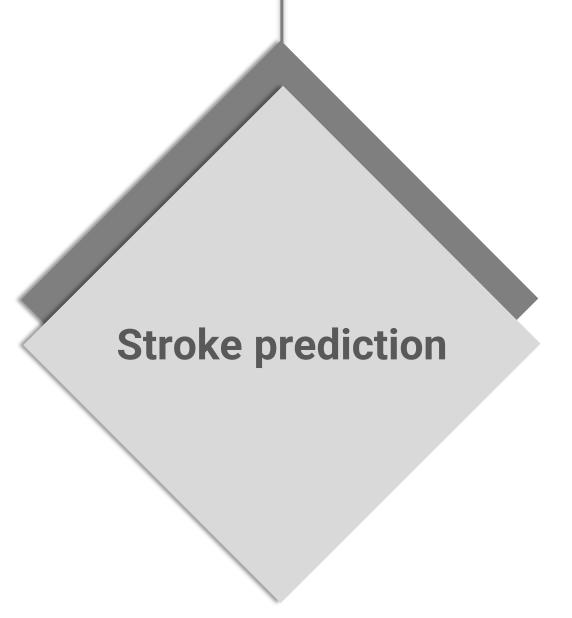


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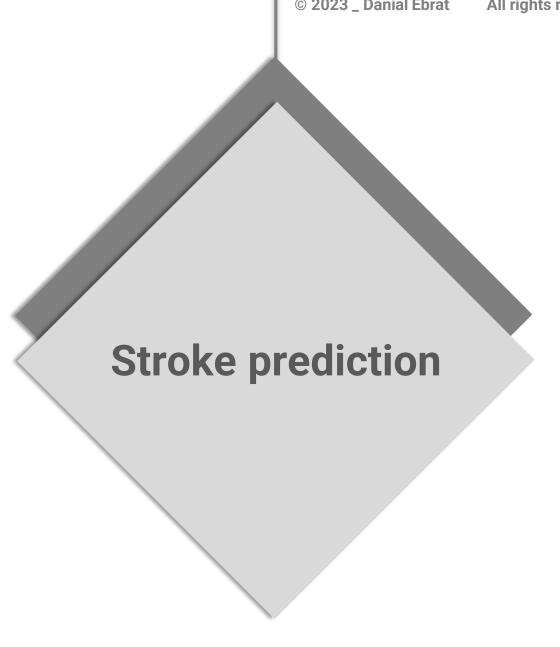


2. ML process



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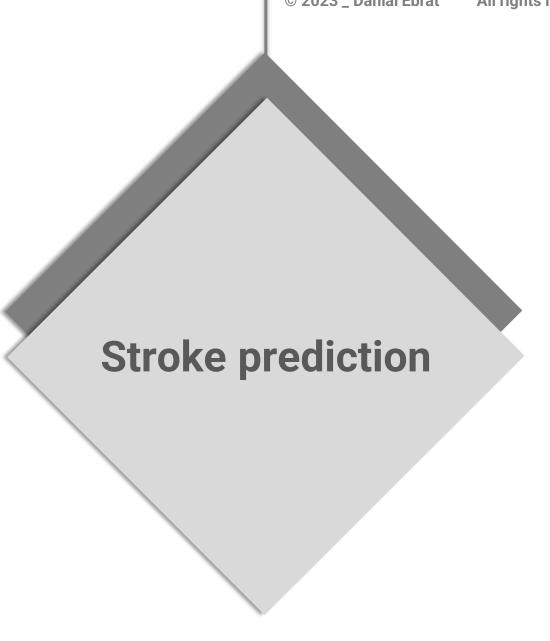


2. ML process



3. Decision Tree





Data



Data

Analyzing



Data

Analyzing

Preprocessing



Data

Analyzing

Preprocessing

Data Science



Data

Analyzing

Preprocessing

Select ML algorithm



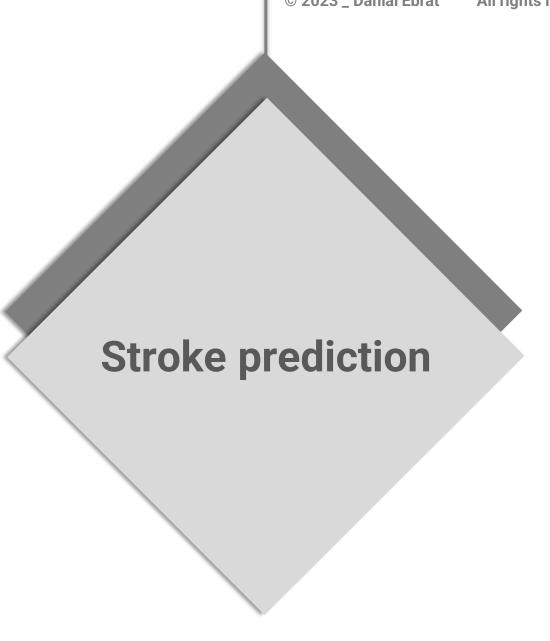


2. ML process



3. Decision Tree







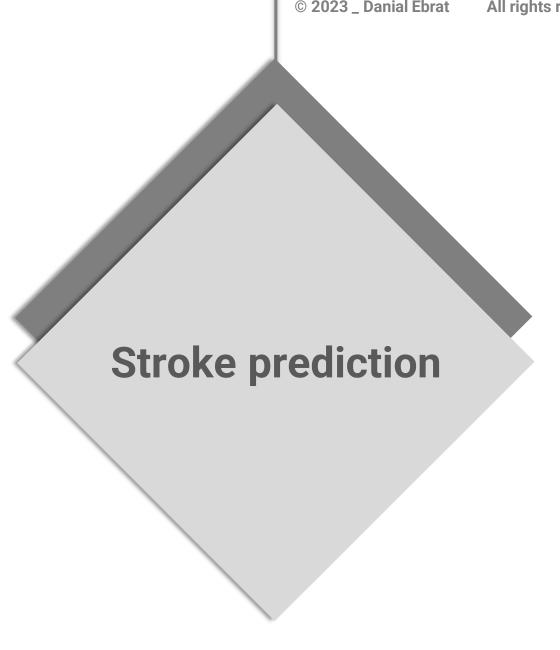


2. ML process



3. Decision Tree







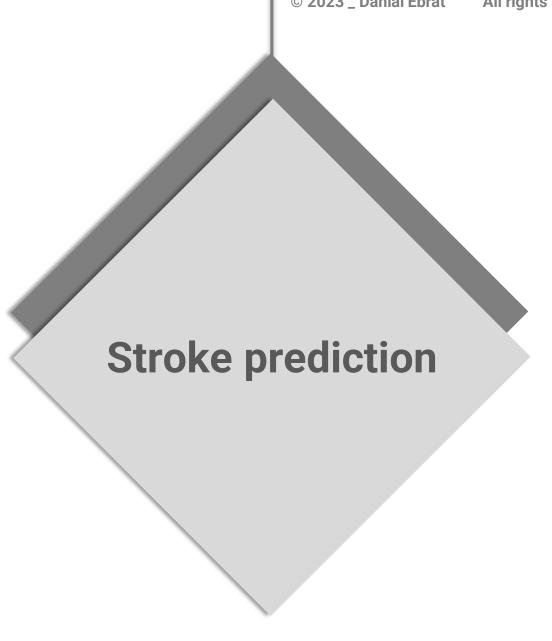


2. ML process



3. Decision Tree







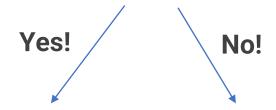
3. Decision Tree





3. Decision Tree

Is it an animal?



Cat Dog Elephant

•••

Humans

Tree

Flower

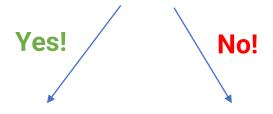
Plants

•••



3. Decision Tree





Hypertension?

The label is not stroke!



The label is stroke



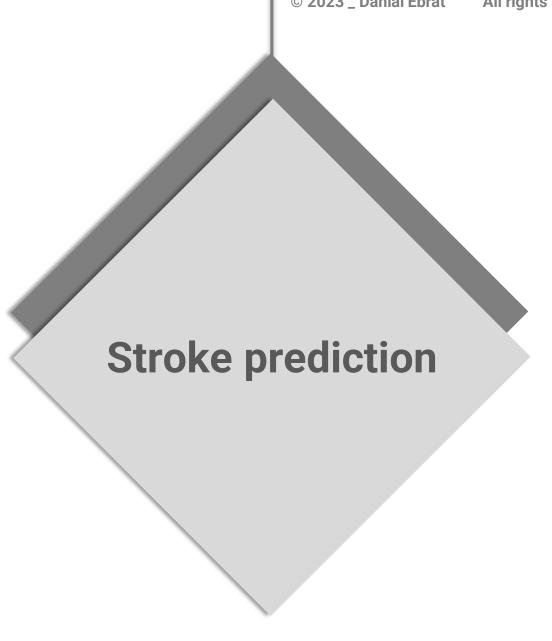


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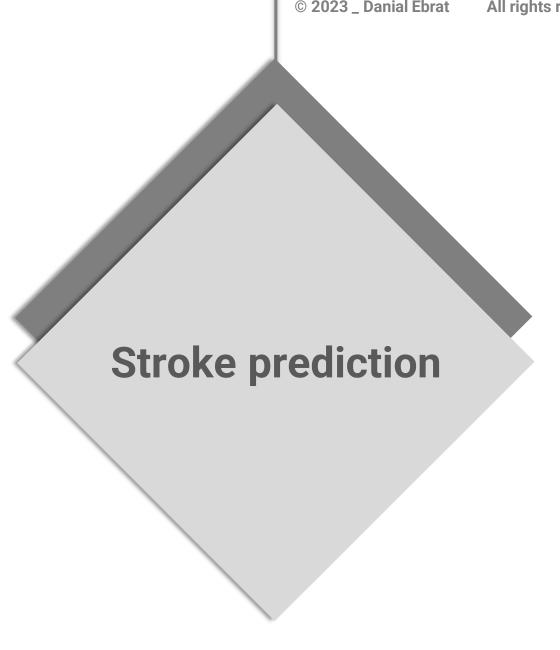


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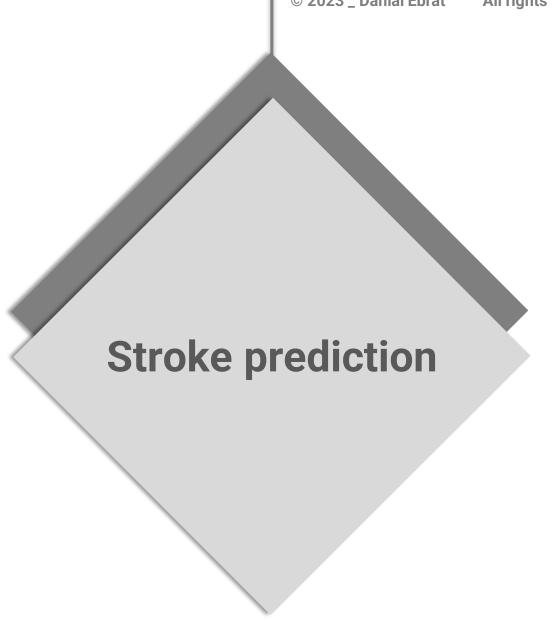


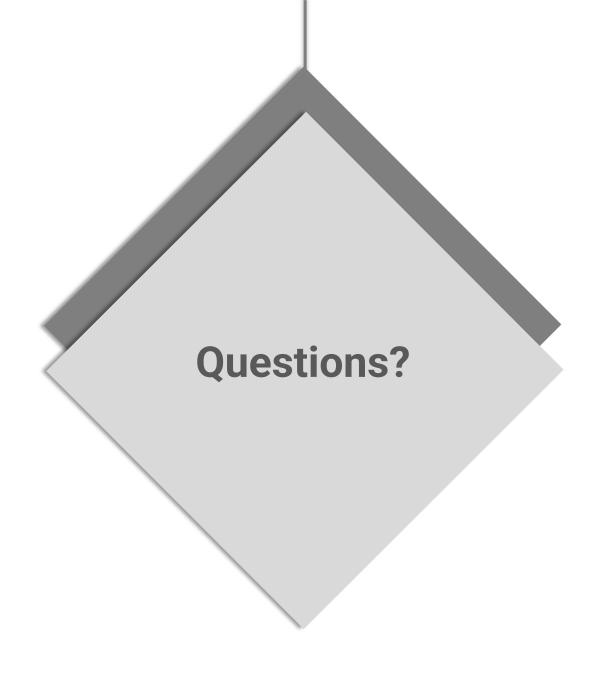
2. ML process



3. Decision Tree









Homework

- 1. Use the data set:
 - Report all the important points that you can see in the data.
 - Analyze each feature and write your thoughts
 - Perform the preprocessing steps on the data