

Spreadsheets



Relational DB

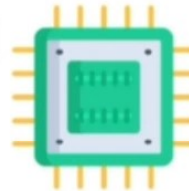


"Big Data"

NoSQL  mongoDB.

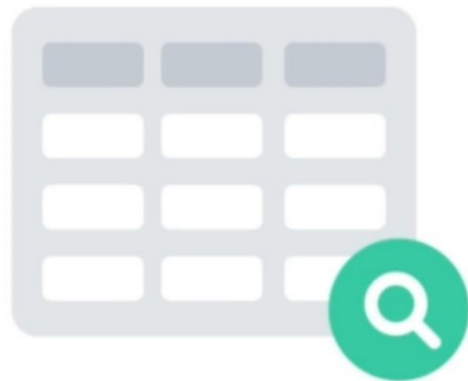


Machine Learning



Steps in a full machine learning project





Data

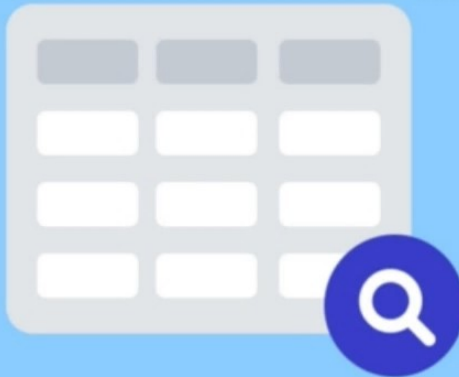


**Machine learning
algorithm**



Patterns

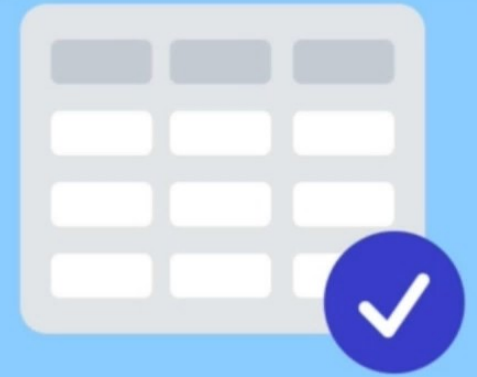
Future



New data



Same algorithm (model)



More patterns

Normal algorithm



1. Cut vegetables
2. Season chicken
3. Preheat oven
4. Cook chicken for 30-minutes
5. Add vegetables



Starts with

Makes

Machine learning
algorithm

Inputs



Output



1. Cut vegetables
2. Season chicken
3. Preheat oven
4. Cook chicken for 30-minutes
5. Add vegetables

Starts with

Figures out

Attempt

1



1. Cut vegetables
2. Season chicken with lots of spice
3. Preheat oven
4. Cook chicken for 30-minutes
5. Add vegetables



2



1. Cut vegetables
2. Season chicken with extra spice
3. Preheat oven
4. Cook chicken for 30-minutes
5. Add vegetables



3



1. Cut vegetables
2. Season chicken a lil' extra spice
3. Preheat oven
4. Cook chicken for 30-minutes
5. Add vegetables



4



1. Cut vegetables
2. Season chicken
3. Preheat oven
4. Cook chicken for 30-minutes
5. Add vegetables



⋮



1. Cut vegetables
2. Season chicken
3. Preheat oven
4. Cook chicken for 30-minutes
5. Add vegetables



100



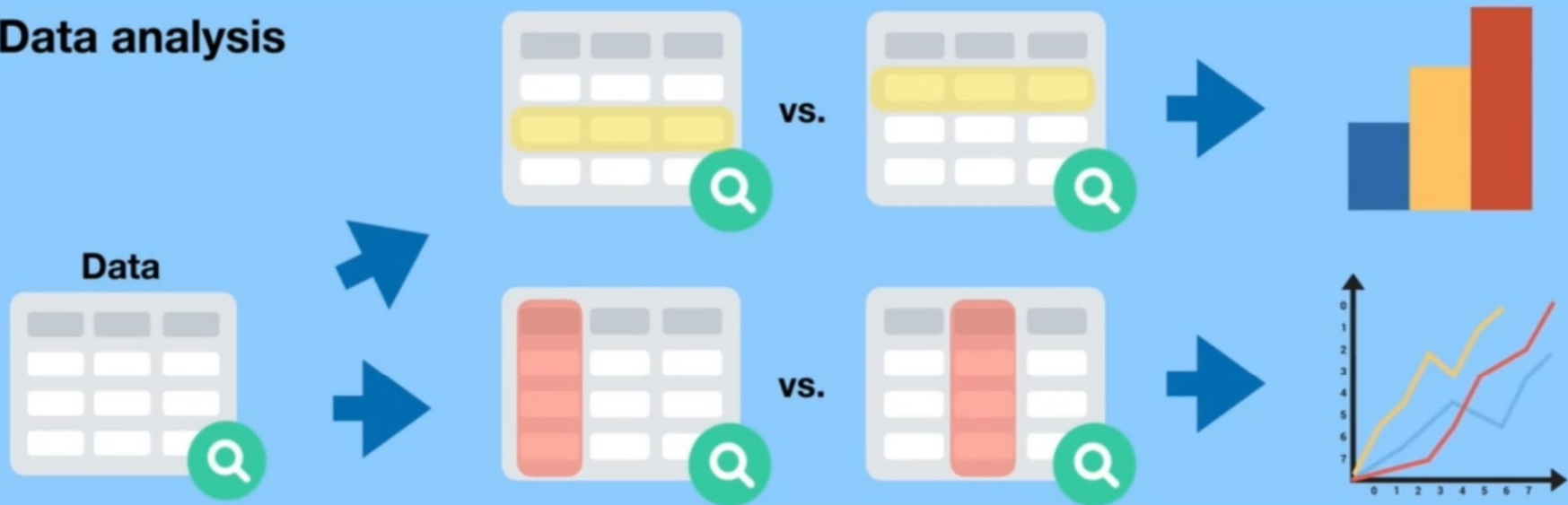
1. Cut vegetables
2. Season chicken
3. Preheat oven
4. Cook chicken for 30-minutes
5. Add vegetables



Machine learning algorithms
may try 1000's of times to find
the right instructions.

Data science

Data analysis

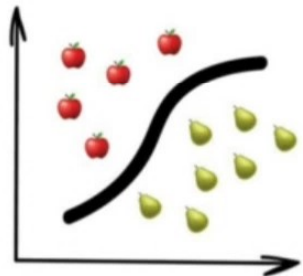


Machine learning

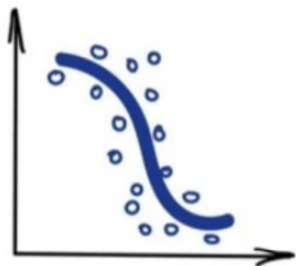


Machine Learning

Supervised

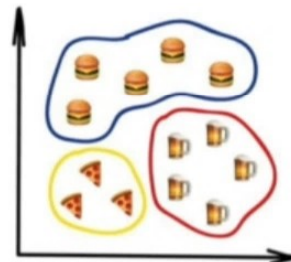


Classification

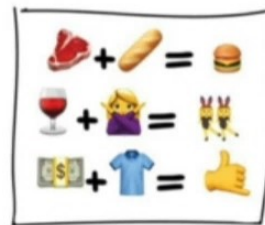


Regression

Unsupervised



Clustering



Association
Rule Learning

Reinforcement



Skill acquisition
Real time learning

Images: https://vas3k.com/blog/machine_learning