AI4ALL

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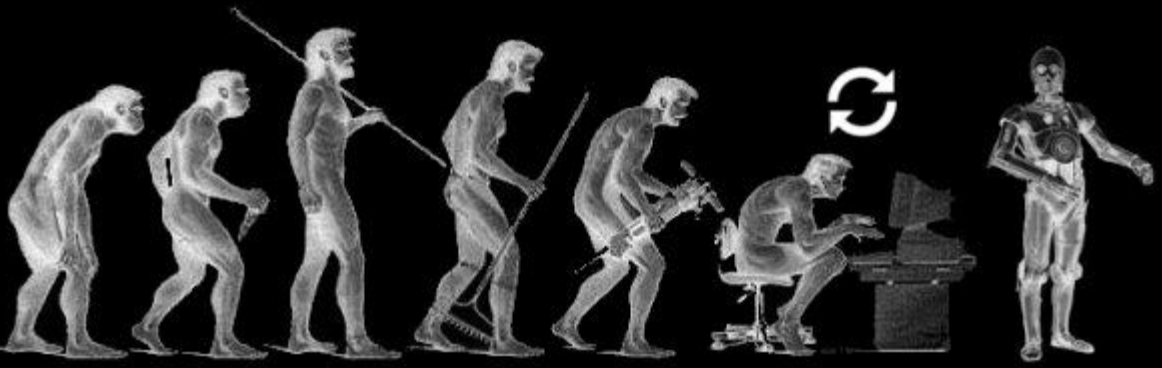

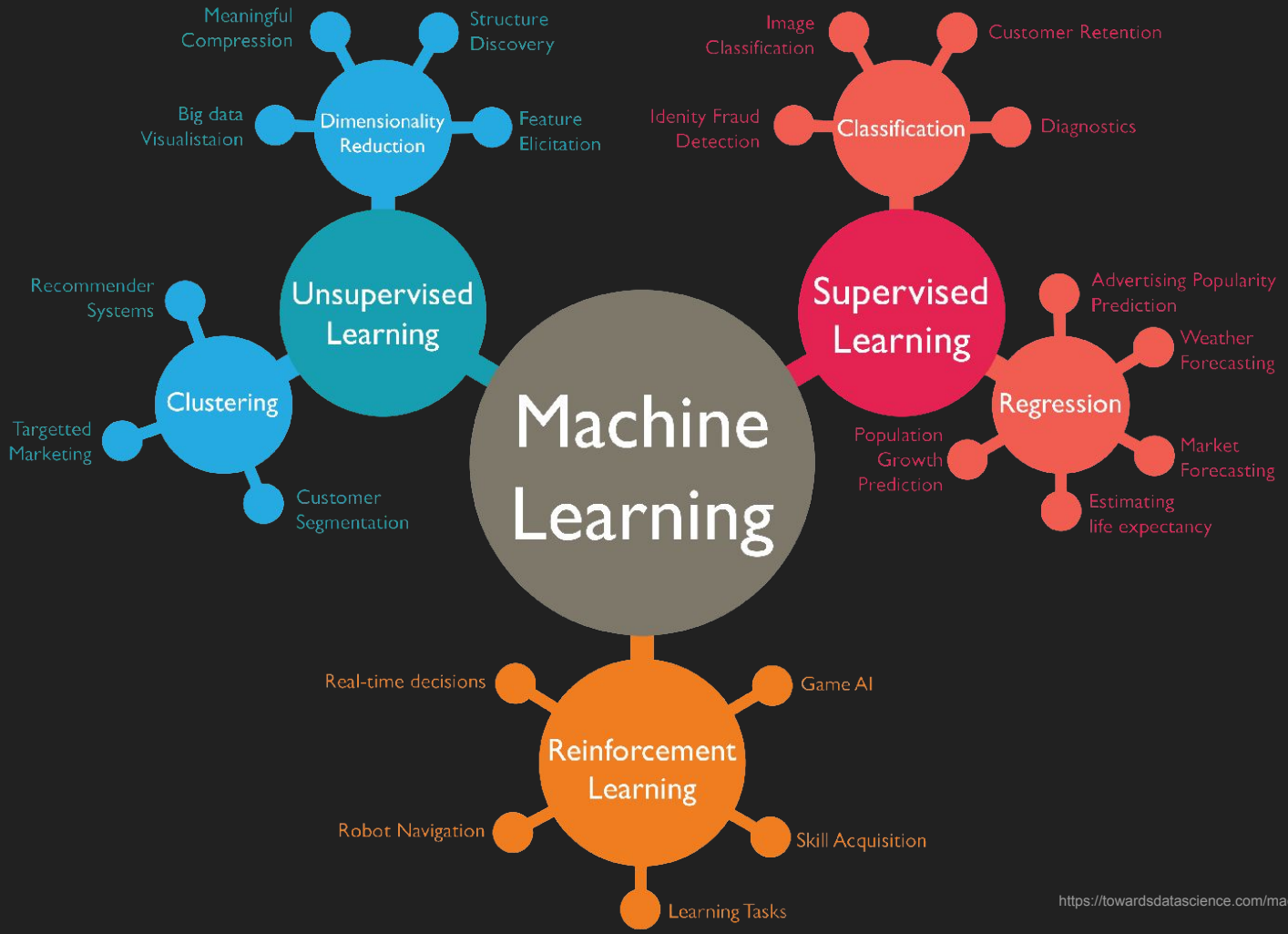

https://towardsdatascience.com/machine-learning-types-2-c1291d4f04b1

Food Ordering Service

Build a chatbot that can get food orders for a pizza restaurant

Let's Create Our Data Set

Order food:

I like to order pizza

I like to place an order

Do you deliver

Do sell pizza?

Let's Create Our Data Set

Cancel/modify order:

I want to cancel

I need to change my order

I don’t want my order

I changed my mind

Python

https://www.pythonanywhere.com/try-ipython/

```
order = ["I want order", "i want"]

cancel=["cancel", "no"]

dic = {}

for s in order + cancel:

    for w in s.split():

        dic[w] = len(dic)
```

Preparing the data

```
import numpy as np

X = np.zeros([len(order)+len(cancel), len(dic)])

i = 0

for s in order + cancel:

    for w in s.split():

        if w in dic:

            X[i,dic[w]] = 1

    i = i + 1

target = [1]*len(order) + [0]*len(order)
```

Fitting the model

```
from sklearn.linear_model import LinearRegression

model = LinearRegression(fit_intercept=True)

model.fit(X,target)
```

Preparing test data

```
X_test = np.zeros([len(test), len(dic)])

i = 0

for s in test:

    for w in s.split():

        if w in dic:

            X_test[i,dic[w]] = 1

    i = i + 1
```

Prediction

```
yfit = model.predict(X_test)
```

Using a service like API.AI

www.api.ai

LEX (Amazon)

IBM Watson

WIT.AI