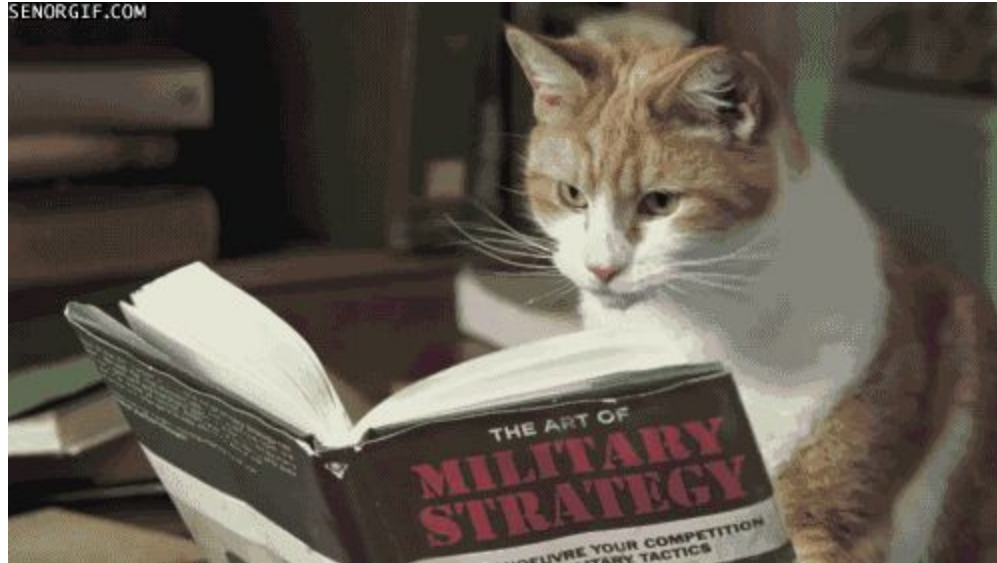


Machine Learning Express

A travel through the valley of algorithms

Pratik Parmar

The Journey: What is Machine Learning?!



The Junctions: Types of Machine Learning

Supervised Learning

Unsupervised Learning

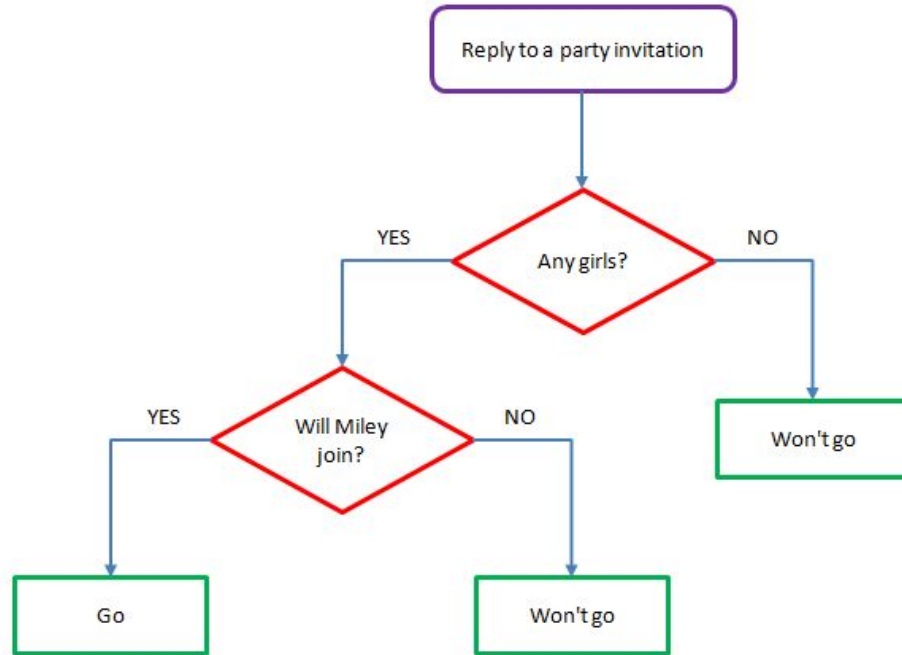
Semi Supervised Learning

Reinforcement Learning

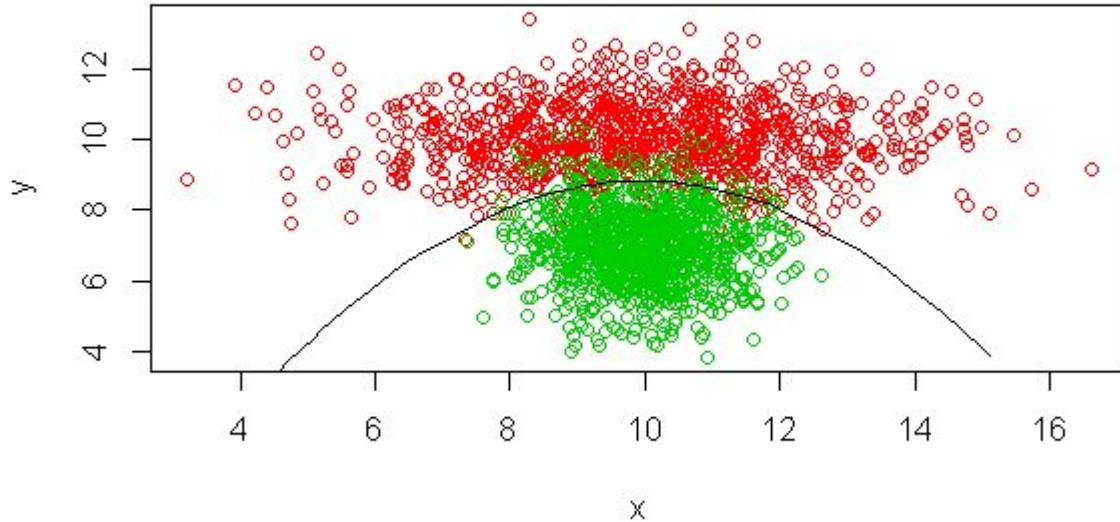
Junction Number 1: Supervised Learning



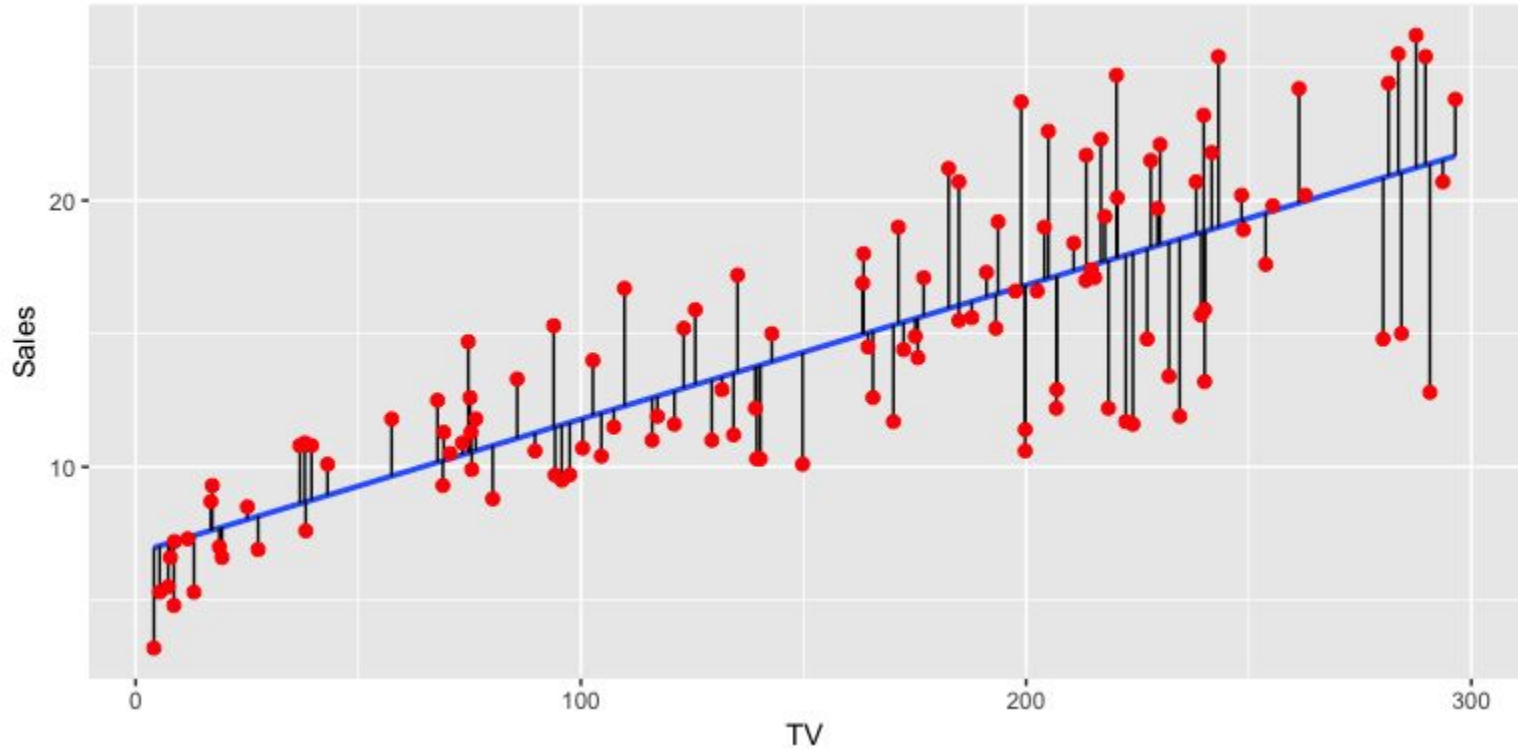
Sightseeing: Decision Trees



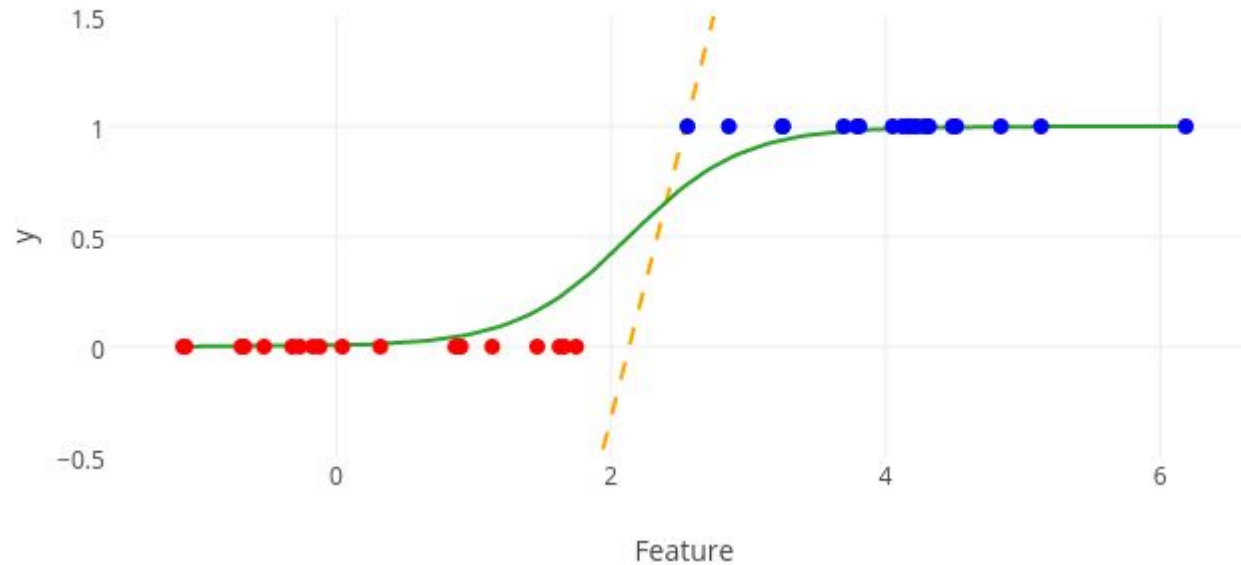
Sightseeing: Naïve Bayes Classification



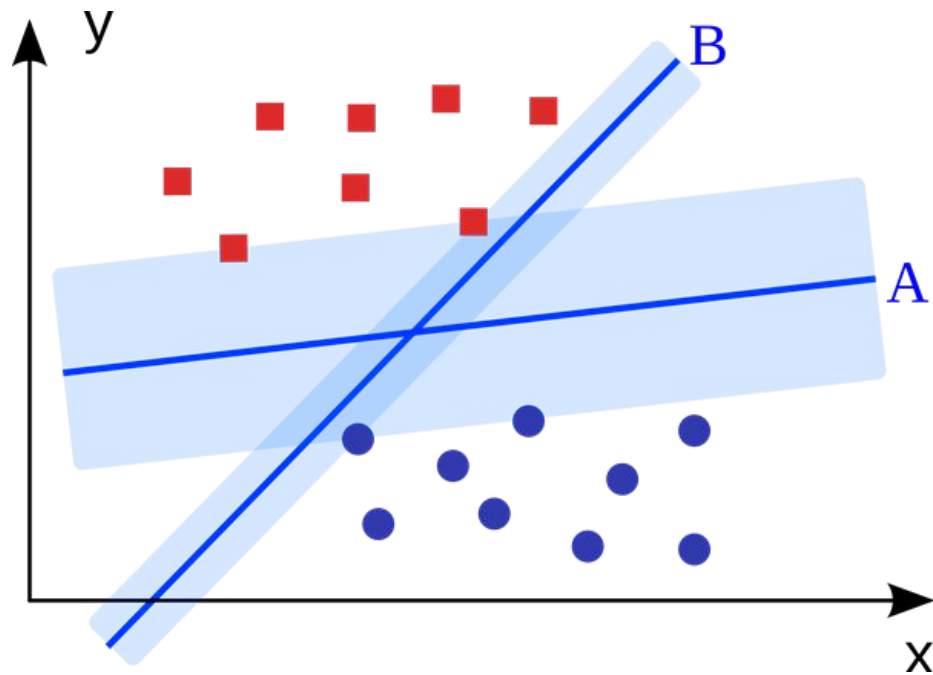
Sightseeing: Linear Regression



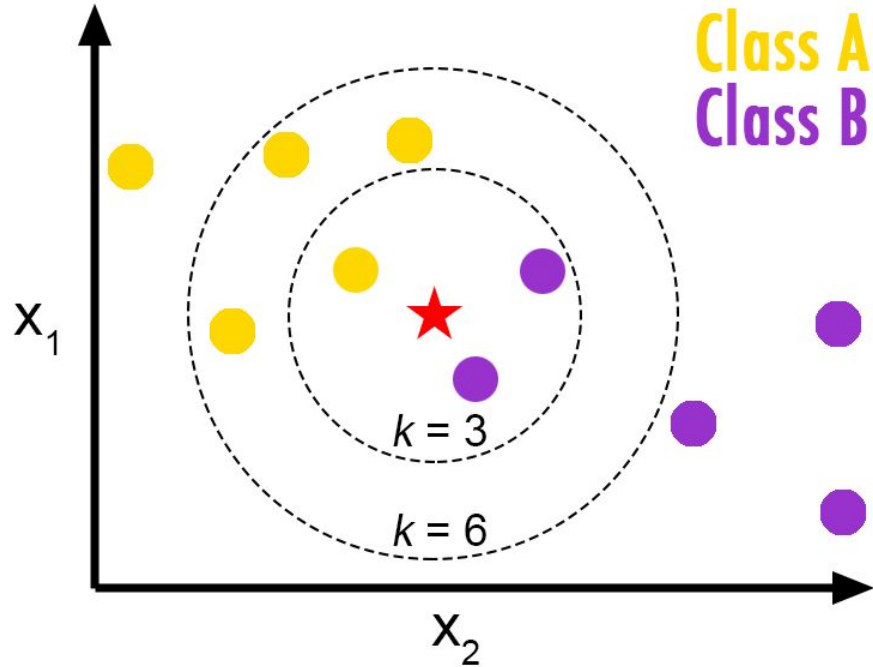
Sightseeing: Logistic Regression



Sightseeing: Support Vector Machines



Sightseeing: K-Nearest Neighbours



Junction Number 2: Unsupervised Learning

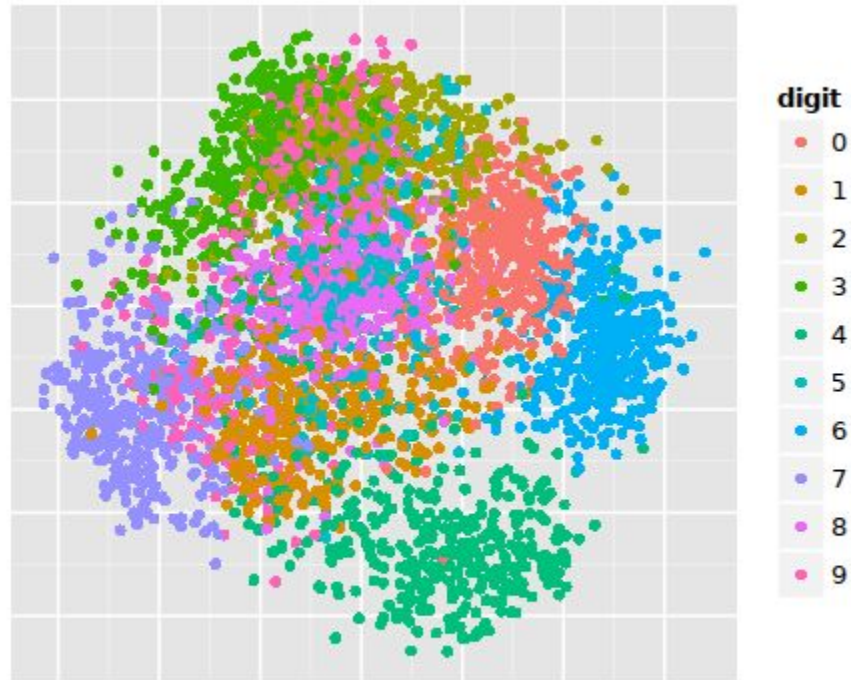
LOL, THAT'S ME: POST #746

**When a friend leaves their
food unsupervised in my
presence:**

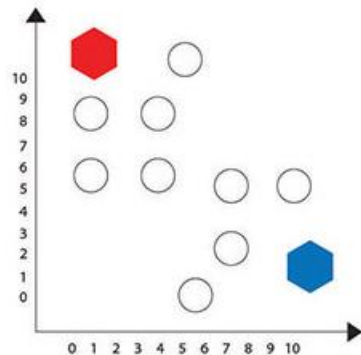


lolthatsme.tumblr.com

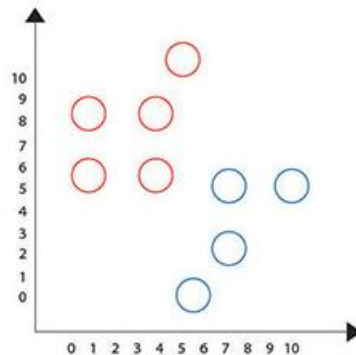
Sightseeing: Clustering



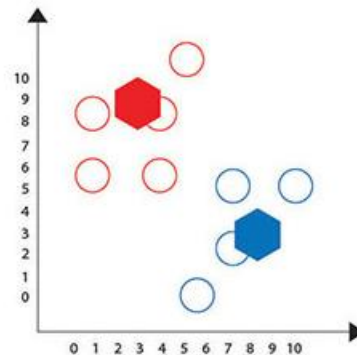
1

Randomly select
K-Clusters ($K = 2$)

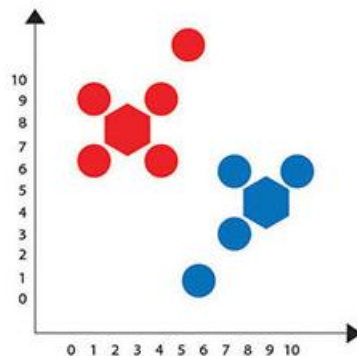
2

Each object assigned to
similar centroid randomly

3

Cluster centers updation depending
on renewed cluster mean

6

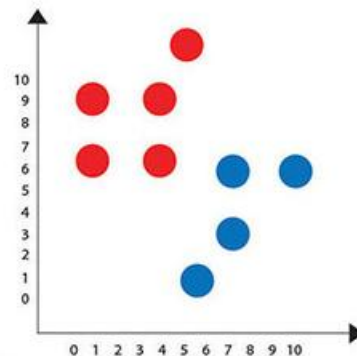
Re-assign
data points

5

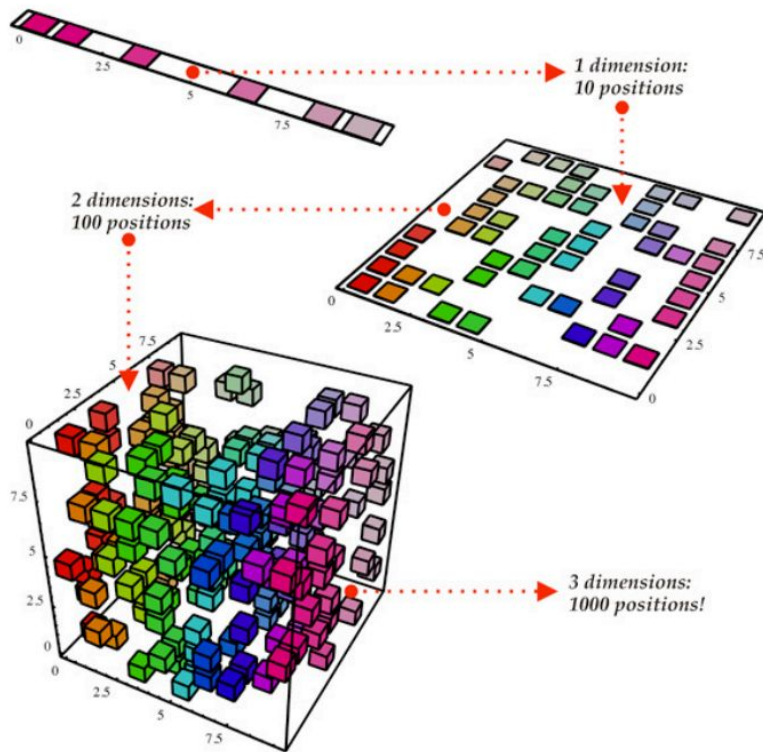
Update
cluster
centers

Interactive process

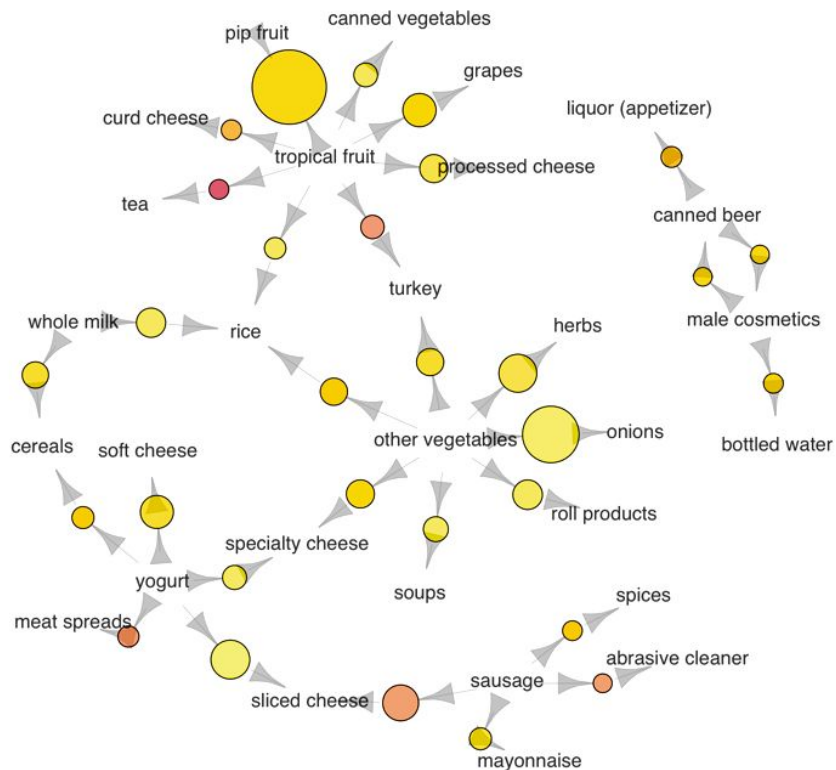
4

Re-assign
data points

Sightseeing: Visualization & Dimensionality Reduction



Sightseeing: Association Rule Learning



Junction Number 3: Semi Supervised Learning



Junction Number 4: Reinforcement Learning





Thank You !!!

