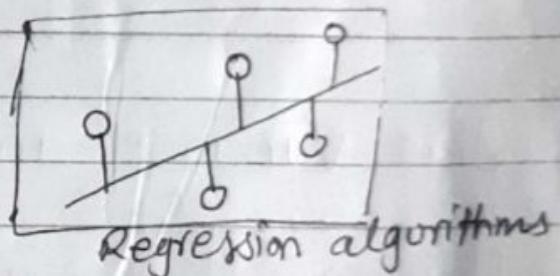


Algorithm Grouped By Similarity

- Algorithms are often grouped by similarity in terms of their function (how they work)
- For example, tree-based method and neural network inspired method



Regression Algorithms

→ is concerned with modeling relationship between variables that is iteratively refined using a measure of error in the prediction made by model

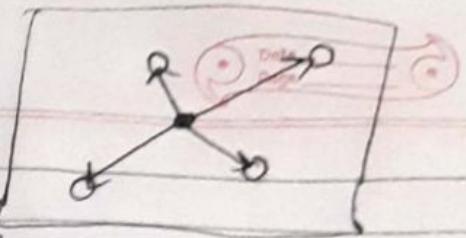
→ Regression methods are a workhorse of statistics and have been co-opted into statistical machine learning.

→ We can use regression to refer to the class of algorithm and the class of problem.

→ The most popular regression algorithm are:-

- linear regression
- logistic regression
- Ordinary least Squares Regression (OLSR)

Instance Based Algorithm



→ Instance based learning model is a decision problem with instances or examples of training data that are deemed important or required to the model.

→ most popular instance-based algorithms are

-) K-Nearest Neighbor (KNN)
-) Learning vector Quantization (LVQ)
-) Self Organized Map (SOM)

Decision Tree Algorithms

→ Decision tree methods construct a model of decisions made based on actual values of attributes in the data.

→ Decision tree are trained on data for classification and regression problem
→ most popular decision tree algorithm are

- Classification & Regression Tree (CART)

