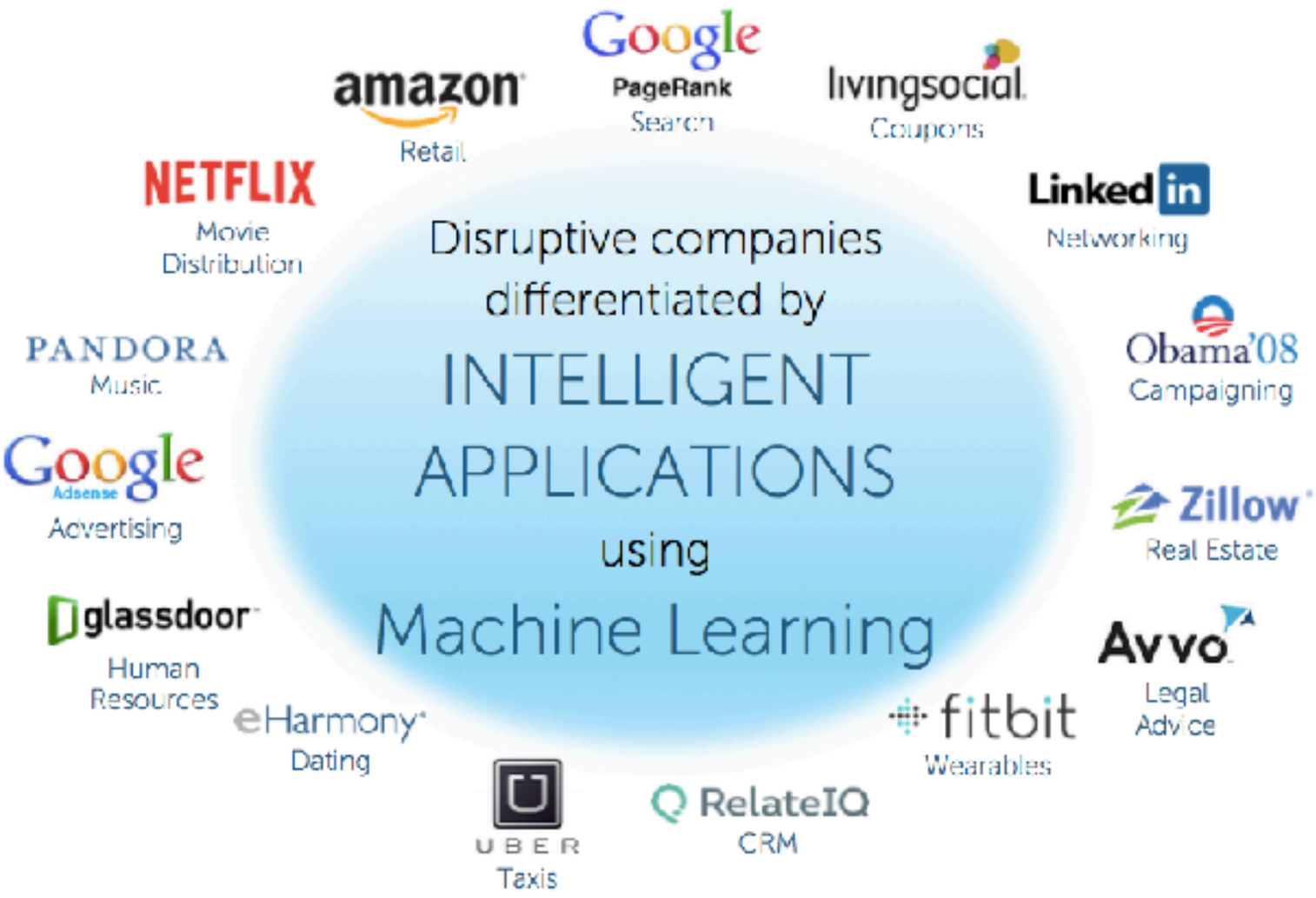
Machine Learning

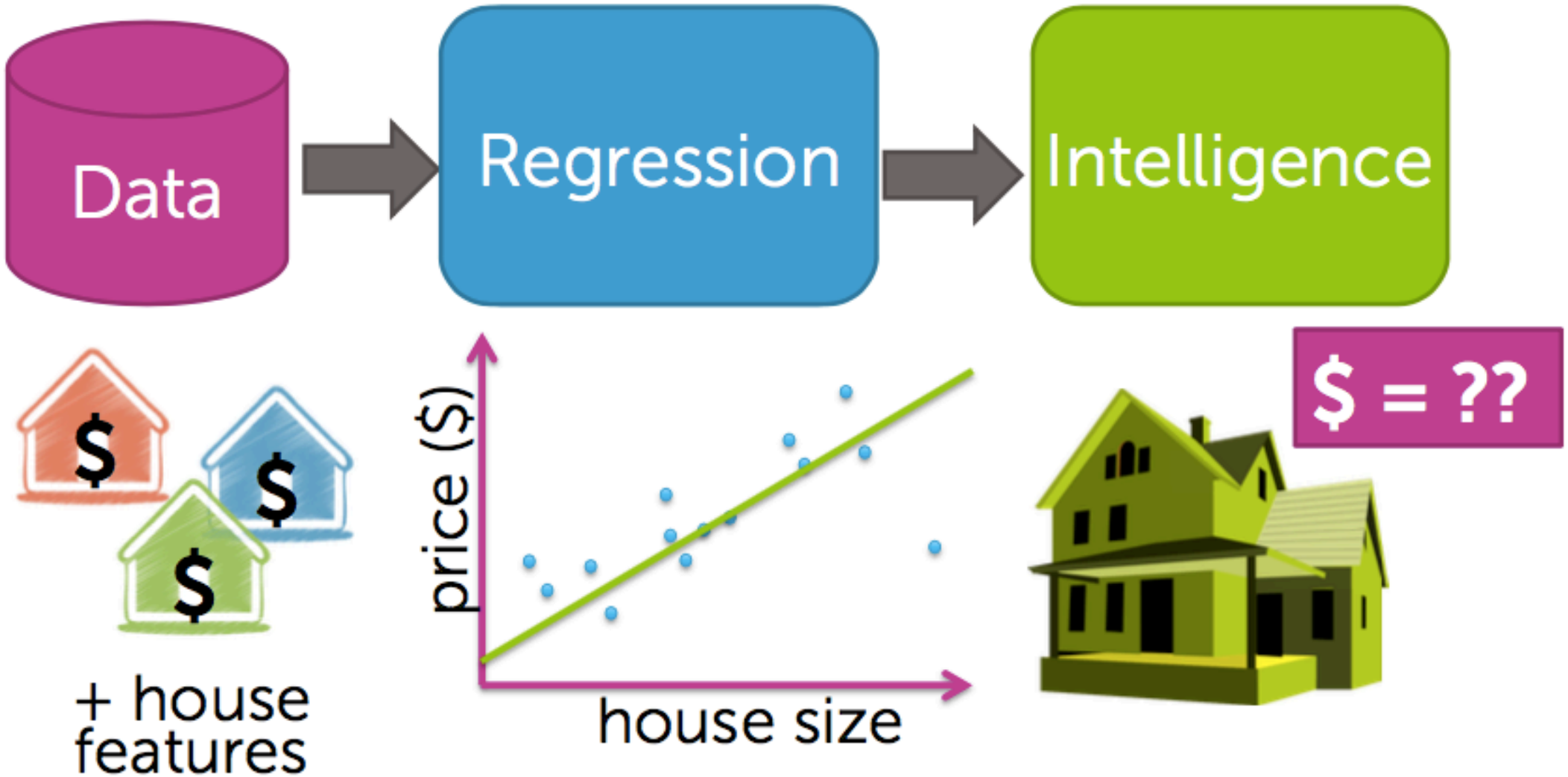
Ladle Patel

Who is using Machine Learning

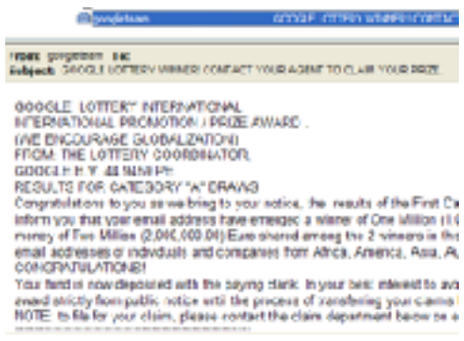


What is Machine learning

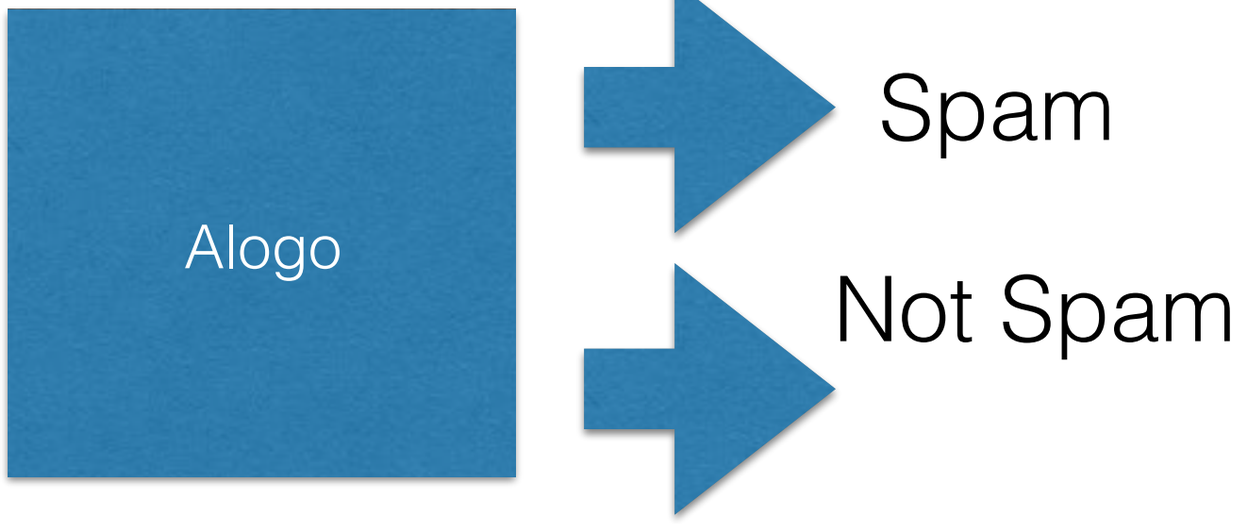
Predict House Price



Document Classification



GOOGLE LOTTERY INTERNATIONAL
INTERNATIONAL PROMOTION / PRIZE AWARD .
(WE ENCOURAGE GLOBALIZATION)
FROM: THE LOTTERY COORDINATOR.
RESULTS FOR CATEGORY "A" DRAWS
CONGRATULATIONS!



Clustering


Data
Clustering
Intelligence


BBC
WORLD
NEWS
SPORTS
WORLD NEWS
ENTERTAINMENT
SCIENCE

Recommendation

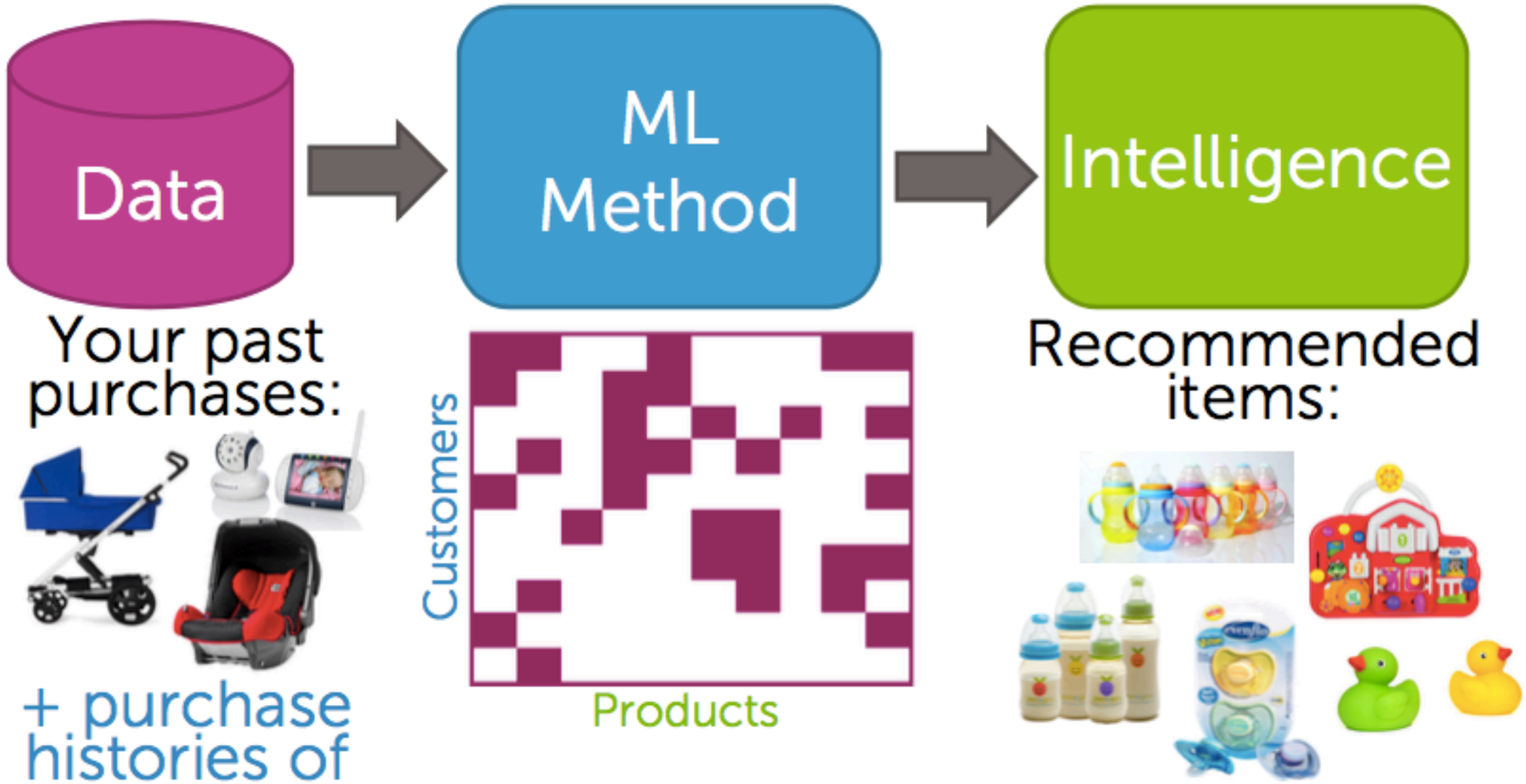
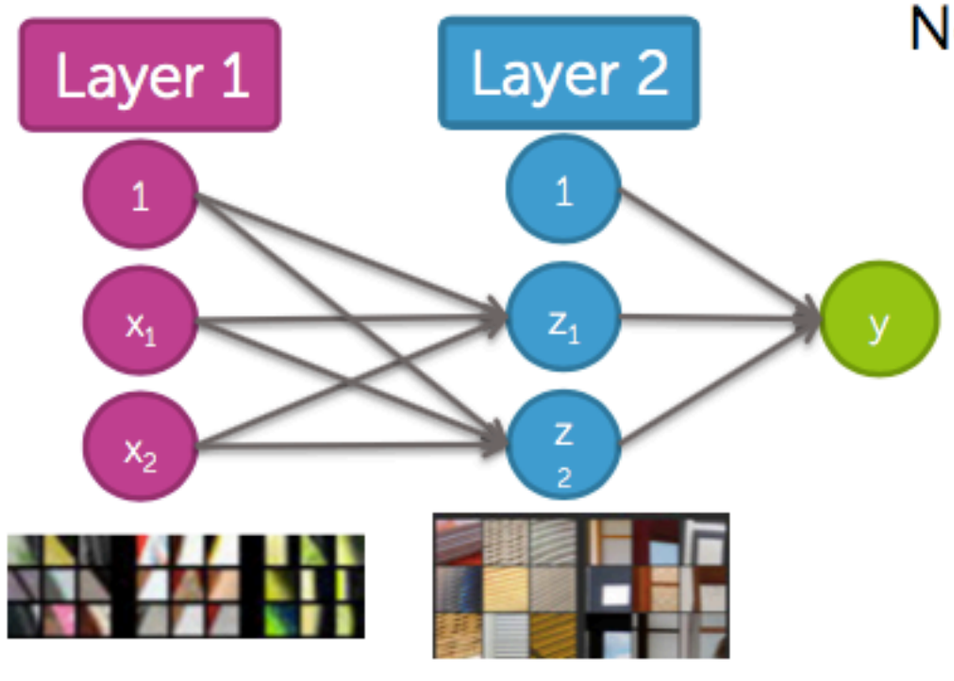


Image matching

Input images:



Nearest neighbors:

Definition

- It is a field of artificial intelligence, which is a sub-field of computer science, in which we teach computers by example and ask computer to predict for new example automatically .

Types of Machine Learning

1. Supervised Learning.

Ex:Regression, Decision Tree, Random Forest, KNN, Logistic Regression

2.Unsupervised Learning.

Ex:K-means.

3.Others

Ex:Markov Decision Process

Terminologies

- **Observations** :Items or entities used for learning or evaluation in the context of spam detection, emails.

- **Features** :Are attributes used to represent an observation.
  Ex:In housing prices prediction ,size,area,floors etc.. Are

- **Labels** :Are values or categories assigned to observations. and again, in the context of spam detection, these can be an email being defined as spam or not spam.

- **Training and test data** :Observations that we use to train and evaluate a learning algorithm.

Tools and Problem

- Matlab.
- Octave.
- R.
- SAS.
- SPSS.
- Python.
- etc..
- Most of the traditional analytical tools runs on single machine.

Thank You.