

Virtual Observations 2012

Introduction to classification methods

- Cluster analysis
 - Nearest neighbor
 - Linear discriminant
- Neural Networks
- Hierarchical trees etc.

Nearest Neighbour





- K-nearest objects
- Probability for each group
- Estimation for the tested object

Linear discrimination





- f(x)=ax+b
- Intersecting classes
- Non-trivial cases

• PCA!

Neural Network





- Percepton
- Training set
- Multiple linear discrimination with coordinate transformation

Self-organizing map



