

Module – I -----> Module-III----->Module-IV-----> Module-II

Implementation : search for “sklearn example”

Module- I

Part1: Concept of Machine Learning, Applications of Machine Learning, Key elements of Machine Learning, Types of learning

Book: study amit Konar Chapter 2,3,4
and Chapter 1 of Machine learning book
and learning pdf

Part2: Statistical Description of Data and Data Visualization, Introduction of Machine Learning algorithms, Mathematical foundations – Linear algebra

scan copy of mathPdf2

part3: Statistical Learning: Bayesian Method, The Naïve Bayes Classifier. Vectorization, Matrices and Vectors

Follow PDF note + PPT-II

Module-III

part1 : Introduction, Model Representation, Gradient Descent vs. Perceptron Training, Stochastic Gradient Descent, Multilayer Perceptron, Multiclass Representation, Back propagation Algorithm

Book : S.N.Deepa chapter 2 and 3 +Module-III PPT

Part2: Regularization and the bias-variance dilemma; decision theory; Support Vector Machines (SVMs); Boosting and Bagging methods; Nearest neighbors and other instancebased/ nonparametric methods

Book : Module-III PPT+ PDF NOTE

Module-II

part1 :Prediction using Linear Regression, Gradient Descent, Linear Regression with one variable, Linear Regression with multiple variables, Feature Scaling/Selection. Dimensionality Reduction