

CHEAT SHEET

Linear SVM

Algorithm Name	Linear SVM
Description	Find the maximum margin separator that has better generalizability.
Applicability	Classification Problems.
Assumptions	Hard margin SVM: data has to be linearly separable. Soft margin SVM: outliers can be ignored.
Underlying Mathematical Principles	Hinge loss, quadratic programming, slack variables.
Hyperparameters	There is no hyperparameter for hard margin SVM. For soft constrained SVM, there is C a parameter to control how much we allowed misclassification.
Additional Details	Open source Packages: Python: https://scikit-learn.org/stable/modules/svm.html General: https://www.csie.ntu.edu.tw/~cjlin/liblinear/

