- Linear Models
- Ordinary Least Squares
- Ridge regression and classification
- Lasso
- Multi-task Lasso
- Elastic-Net
- Multi-task Elastic-Net
- Least Angle Regression
- LARS Lasso
- Orthogonal Matching Pursuit (OMP)
- Bayesian Regression
- Logistic regression
- Generalized Linear Regression
- Stochastic Gradient Descent - SGD
- Perceptron
- Passive Aggressive Algorithms
- Robustness regression: outliers and modeling errors
- Polynomial regression: extending linear models with basis functions
- Stochastic Gradient Descent
- Classification
- Regression
- Stochastic Gradient Descent for sparse data
- Complexity
- Stopping criterion
- Tips on Practical Use
- Mathematical formulation
- Implementation details