Proofread of Computing Note

1 Linear regression: ~~least squares~~ Least Squares, ~~ridge~~ Ridge, Lasso

1.1 Computationally, the above property enables us to implement the matrix sweep ~~by~~ as a sequence of scalar sweeps.

1.2 The dataset of linear regression consists of an n × p matrix X = (xij), and a n × 1 vector Y = (yi). The model is of the ~~following~~ form:

1.3 Gauss-Jordan elimination For a system of linear equations Ax = b, where A = (aij) is n × n, x = (xi) is n × 1, and b = (bi) is n × 1, we can solve for x = A^{−1} ~~by~~ using Gauss-Jordan elimination.

1.7 The Lasso regression estimate ~~by~~ is given by

1.8 The red curves ~~is~~ form the contour plot.

1.10 the algorithm maintains that ~~to be~~ is lambda or -lambda

1.11 then beta1 will be ~~the~~ the intercept term.

1.10 If Y is ~~Scaler~~ Scalar in order to maximally ~~reducing~~ reduce