

CS 760: Machine Learning - Fall 2020

Homework 3: Logistic Regression

Due : 10/22/2020

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Problem 1

Proof.

- (a) Step size: $\eta_t = -(\nabla^2 \ell(\theta_t))^{-1}$
- (b) Stop at the 7th iteration.
- (c) $\hat{\theta} = [2.53996931, -1.17765865, 2.75728236, -0.04347367, -0.40183102, -0.10650523, 0.00278568]$
- (d) $\ell(\hat{\theta}) = -390.465964754707$

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Problem 2

Proof.

□

Problem 3

Proof.

□

Problem 4

Proof.

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