

IST 597: Homework 6

Justin Silverman

Problem 1 (100 points)

For this problem you must code your own model from scratch. You may implement whatever model you wish. **You may *not* use any functions in scikit-learn or any other machine learning framework. Everything must be hand coded.** You may use libraries for optimization (e.g., scipy-optimize) and for numerical routines (e.g., numpy). You must submit your code to show that everything is hand-coded.

Cluster the two dimensional data in `data_hw6_problem1.csv`. You should submit your cluster assignments as a file `[your last name]_hw6_problem1_predictions.csv` which should have one column that simply gives the cluster assignments (integers starting from 1) of each of the data points in `data_hw6_problem1.csv`.

Students will be scored based on Adjusted Rand Index and/or Variation of Information.

As always, partial credit is available but requires you explain your thought process, display insight, and recognize what you do/don't know.