

Quiz Friday (SLOT-2)

0. Linear SVMs have no hyperparameters that need to be set by cross-validation

- a. True
- b. False

ANS: (b)

1. Minimum number of support vectors required to train an SVM (binary classification):

- a. All data points
- b. 3
- c. Depends on dataset
- d. 2

ANS:(d)

2. Image compression can be done using

- a. Jpeg
- b. Zip
- c. PCA
- d. None of the above

ANS:(a),(c)

Zip is lossless compression. Even if you have marked/not Zip, marks have been awarded if (a)&(c) are marked.

3. In a real problem, you should check to see if the SVM is separable and then include slack variables if it is not separable.

- a. True
- b. False

ANS:(b)

you can just run the slack variable problem in either case but you need to pick C.

4. Why are SVMs often more accurate than logistic regression?

ANS: LR is more sensitive to outliers than SVM because the cost function of LR diverges faster than those of SVM. While SVMs ignore the points that are clearly correct, LR uses all data points.