

## ReadMe

There are 5 program files in the zip

1. task1\_1: hard margin with linear kernel
2. task1\_2: hard margin with polynomial kernel
3. task1\_3: soft margin with polynomial kernel
4. task3: self-design SVM, for testing train data and test data
5. svm\_main: for testing train data and eval data

if you run the program1-4, please ensure that train.mat, test.mat are in the matlab directory.  
For program 5, please ensure that train.mat is in the matlab directory and eval.mat is in the workspace.

The first three files can both compute  $g(x)$  required in task1 and get train and test accuracy required in task1.

For all the result, 'tracu' indicates train accuracy and 'teacu' indicates test accuracy.