

## Phase 02: Tuning Each Classifier

.....

In the command window of Matlab, type “help <file\_name.m>” to see the header documentation of my program scripts.

.....

### Note 1:

This folder contains following main script. Go to Matlab Command Window and type the target main script (For example >> `tune_classifier`) for execution.

- `tune_classifier.m`
    - Read the main script header for more details.
    - This program will tune (maximize the accuracy) each classifier iteratively by changing one of their sensitive parameter.
    - It generates following four “txt” files and four “bmp” files (in the current directory) that contain graphs and information about the peak point of a graph.
      - \* `disa_tune.bmp`
      - \* `svm_tune.bmp`
      - \* `knn_tune.bmp`
      - \* `tree_tune.bmp`
      - \* `disa_output.txt`
      - \* `svm_output.txt`
      - \* `knn_output.txt`
      - \* `tree_output.txt`
- .....

### Note 2:

This folder contains following function scripts (You don’t need to run them separately).

- `disa_tune.m`
  - Read the function header for more details.
  - This function is used inside `tune_classifier.m`.
- `tree_tune.m`
  - Read the function header for more details.
  - This function is used inside `tune_classifier.m`.

- `knn_tune.m`
  - Read the function header for more details.
  - This function is used inside `tune_classifier.m`.
- `svm_tune.m`
  - Read the function header for more details.
  - This function is used inside `tune_classifier.m`.
- `my_svmclassify.m`
  - Not my major contribution. I slightly modify the built-in matlab function to generate probability instead of '0' or '1' labels.
  - This function is used inside `tune_classifier.m`.
- `my_svmdecision.m`
  - Not my major contribution. I slightly modify the built-in matlab function to generate probability instead of '0' or '1' labels.
  - This function is used inside `my_svmclassify.m`.

.....  
In the command window of Matlab, type “help <file\_name.m>” to see the header documentation of my program scripts.  
.....