## READ\_ME

Explain MATLAB .m files in this folder.

- 1. Libsvm-3.21 is the SVM library used for this project.
- 2. Training model file: repeat.m, YijiaJin\_project.m, hard.m

repeat.m: fulfill Algorithm 1 in report, training model in loop to get average accuracy & error information

YijiaJin\_project.m: base program for active learning, it is the base of repear.m and hard.m, trains an active learning model and compare it with a random one. Draw plot dynamically to see the performance.

hard.m: fulfill Algorithm 2 in report, active learning with feature selection for difficult data set.

3. Query strategy function: infor\_fs.m, infor.m, magin.m, distance.m

infor.m: query strategy based on confidence and entropy.

infor fs.m: query strategy based on confidence and entropy with feature selection.

magin.m: query strategy based on margin value.

distance.m: query strategy based on distance, not used.

4. random learner function: randilearner.m, randilearner fs.m, randomLearner.m

randilearner.m: each time add random data to random learning training set.

randilearner\_fs.m: randilearner.m with feature selection.

randomLearner.m: each time get data from whole set and train a random model.

5. other function: smallSection.m

smallSection.m: some useful code not related to algorithm.