

EXERCISE 4

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1. SUPPORT VECTOR MACHINES

- (1) Download and install libSVM from <https://www.csie.ntu.edu.tw/~cjlin/libsvm/>
- (2) Run the experiments specified in the readme file to test that your installation is correct

```
matlab> [heart_scale_label, heart_scale_inst] = libsvmread('../heart_scale');
matlab> model = svmtrain(heart_scale_label, heart_scale_inst, '-c 1 -g 0.07');
matlab> [predict_label, accuracy, dec_values] =
svmpredict(heart_scale_label, heart_scale_inst, model); % test the training data
```
- (3) Apply support vector machines to classify the Chagas parasite images using the feature vectors that you generated in exercise 3. You need to run experiments using the linear, polynomial, sigmoid and radial basis kernels.
- (4) Prepare a report containing your final results.

2. EXERCISE SUBMISSION

- Send your report to cetina@informatik.uni-hamburg.de with the email title string: **MLEX4 Lastname1-Lastname2-Lastname3**
- Deadline: A day before your next exercise session.
- Note: Do not forget to include your names in the report!