## Home assignment 3

## April 20, 2015

Deadline 27.04.2015 23:59 PDF file of the report should be sent to sven.nomm@gmail.com Scripts, codes, functions etc. should be presented during the practice on 30.04.2015.

If you do not know which data file is for you please contact me by e-mail sven.nomm@gmail.com to request number of the file.

Please DO NOT SEND your report to any other e-mail addresses!!!

Please present your **own** original work. Strictly no plagiarism!!! Results should be supported by necessary computations, scripts, functions and codes.

Preferred implementation language is MATLAB. You are allowed and encouraged to use standard MATLAB functions from the NN and Statistics toolboxes. Please keep number of pages reasonable!

Report (preferably in LATEX) should be structured as follows:

- 1. Student name and code;
- 2. Problem statement;
- 3. Short description of the used method(s);
- 4. Description of the implementation;
- 5. Description of the experiments and results;
- 6. Remarques.

## 1 Neural Networks

Present assignment requires one to perform two steps

- 1. Cluster the data using competitive learning techniques.
- 2. For each cluster train the NN-model which resembles underlying non-linear process.

You are encouraged to illustrate your results!!!