

SF2935 Modern Methods of Statistical Learning

Project 2

The project should be done in groups of **two**.

A computer written¹, self-containing, report of the subjects presented below should be handed in no later than **Friday 16 December 2016 13:00** by email to `flrios@math.kth.se`. The **subject** of the email should be

SF2935 Project 2: Full Name 1, Full Name 2

and **name the document**

SF2935Project2-FullName1-FullName2.pdf

Also bring a **printed copy to the project presentation seminar**.

If Johan Westerborn and Felix Rios submits project 2 then the email subject should be SF2935 Project 2: Johan Westerborn, Felix Rios and the document should be names SF2935Project2-JohanWesterborn-FelixRios.pdf they also bring one copy to the presentation seminar.

Resampling Methods and Model Selection

In this project we will study the different resampling methods presented in chapter 5 and the model selection methods presented in chapter 6.

The written report should include the following:

- Explain the different resampling methods, cross-validation and bootstrap.
- Give an overview of the subset selection, shrinkage methods and dimension reduction methods.
- Solve and present solutions to the Conceptual exercises 1 and 2 in chapter 6 on page 259.
- Solve and present solutions to the Applied exercises 6 chapter 5 on page 199, and exercise 9 chapter 6 on page 263.

¹Preferably using \LaTeX