

**Homework 5. Model Assessment and Selection***Instructor: Yuan Yao*

For the experimental problem, include the source codes (as Appendix) which are runnable under standard settings. On the head of your submitted homework, please mark *NAME - student ID*.

By (ESL), please refer to the Elements of Statistical Learning, Edition II, the 10<sup>th</sup> print

[http://statweb.stanford.edu/~tibs/ElemStatLearn/printings/ESLII\\_print10.pdf](http://statweb.stanford.edu/~tibs/ElemStatLearn/printings/ESLII_print10.pdf)

1. (ESL) Exercise 7.3
2. (ESL) Exercise 7.4
3. (ESL) Exercise 7.5
4. (ESL) Exercise 7.8
5. (ESL) Exercise 7.9

A (Crowdsourced voting on Age Identification) It is always hard to tell the age given a face image, while it is relatively easy to identify which one looks older given two faces presented together. The following crowdsourcing task, created at a website made by Tsinghua University, aims to collect pairwise comparison data for age identification.

[1.] Go to the following website and create a *worker* account

<http://www.chinacrowds.com>

[2.] Sign in with your worker account and choose task 370 for age comparisons

[3.] Input your voting (preferred at least 50 tasks for each person): 10 tasks per page and remember to submit when you finish a page.