Homework 1
Statistical Methods in Applied Computer Science
DD2447

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Exercise 5.1

Solution.

Exercise 5.3

Solution.

Exercise 5.9 Posterier median is optimal estimate under L1 loss
Prove that the posterior median is optimal estimate under L1 loss.

Solution.

Exercise 5.10 Decision rule for trading FPs and FNs
If $L_{FN} = cL_{FP}$, show that we should pick

$$\hat{y} = 1 \Leftrightarrow p(y = 1|x)/p(y = 0|x) > \tau,\ \tau = \frac{c}{1+c} \tag{1}$$

Solution.