Bookmarks

- Unit 0: Overview
- Entrance Survey
- Unit 1: Probability models and axioms
- Unit 2: Conditioning and independence
- Unit 3: Counting
- Unit 4: Discrete random variables
- Exam 1
- Unit 5: Continuous random variables
- Unit 6: Further topics on random variables
- **Unit 7: Bayesian inference**

Exercise: Comparison for the coin problem

(1/1 point)

Recall that the MAP estimator for the problem of estimating the bias of a coin is X/n, which is different from the LLMS estimator $(X+1)/(n+2)$. How do they compare in terms of mean squared error (MSE)?

- MAP has a smaller MSE.
- LLMS has a smaller MSE. ✔
- They have the same MSE.

Answer:
The LLMS estimator coincides with the LMS estimator and therefore achieves the smallest possible mean squared error.

You have used 1 of 1 submissions

Unit overview

Lec. 14: Introduction to Bayesian inference
Exercises 14 due Apr 06, 2016 at 23:59 UTC

Lec. 15: Linear models with normal noise
Exercises 15 due Apr 06, 2016 at 23:59 UTC

Problem Set 7a
Problem Set 7a due Apr 06, 2016 at 23:59 UTC

Lec. 16: Least mean squares (LMS) estimation
Exercises 16 due Apr 13, 2016 at 23:59 UTC

Lec. 17: Linear least mean squares (LLMS) estimation
Exercises 17 due Apr 13, 2016 at 23:59 UTC

Problem Set 7b
Problem Set 7b due Apr 13, 2016 at 23:59 UTC

Solved problems

Additional theoretical material

Unit summary

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