

Errata: Fundamental Statistical Inference: A Computational Approach

Section 2.8 (More On (Moron?) Hypothesis Testing)

1. This is not an error, but rather a supplement. I just became aware of Gerd Gigerenzer's 2004 article in the Journal of Socio-Economics, 33, pp. 587–606, entitled Mindless statistics. It is a great, informative read, and I wish I had known about this article before having published my book.

Chapter 3 (Likelihood)

1. On page 109, after equation (3.48), in the proof of the Cramér–Rao lower bound,

$$\int_{\mathbb{R}^n} U \frac{\dot{\ell}}{\mathcal{L}} f_{\mathbf{X}}(\mathbf{x}; \theta) d\mathbf{x}$$

should be

$$\int_{\mathbb{R}^n} U \frac{\dot{\mathcal{L}}}{\mathcal{L}} f_{\mathbf{X}}(\mathbf{x}; \theta) d\mathbf{x}$$

(It was correct in my original submitted notes! Aargh!)

Chapter 4 (Numerical Optimization)

1. On page 123, second to last line, the expression $\|\cdot\|$ should of course be $\|\cdot\|$. (It was correct in my original submitted notes. I presume the editor wanted to add a negative space, the latex $\|\cdot\|$.)

2. On page 132, in the text:

Using v_0 , μ_0 and c_0 as initial guesses for v , μ and c , respectively, the first step solves $\dot{\ell}_v(v, \mu_0, \sigma_0; \mathbf{x}) = 0$ to get v_1 , which improves upon v_0 and can be viewed as \hat{v}_{ML} given $\mu = \mu_0$ and $c = c_0$.

the four occurrences of c should all be σ .

Similarly, on page 132, c_0 should be σ_0 in the text: The one issue that remains is the choice of starting values v_0 , μ_0 and c_0 .

3. On page 133, in the text “The reader is invited to implement the estimation procedure in Problem 3.1, while Problem 3.2...”, the problems should be 4.1 and 4.2.

Chapter 5 (Methods of Point Estimation)

1. On page 161, in the piece of code

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n=100; k=3; pick=zeros (n , k ) ;
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the two occurrences of lower case n should be capital N.

2. On page 177, bottom line, in the text “The left panel of Figure 5.8”, left should be top. Similarly for the caption of Program Listing 5.3. Finally, on page 178, in the text “The right panel of Figure 5.8”, right should be bottom.

3. On page 187, in the caption of Program Listing 5.7, it should read:

... where $X_i \stackrel{\text{i.i.d.}}{\sim} S_{\alpha, \beta}(\mu, c)$, ...

Chapter 6 (Q-Q Plots and Distribution Testing)

1. On page 260, in the text “The left panel of Figure 6.33”, it should say “The top panel”. Similarly, on page 261, in the text “The right panel of Figure 6.33”, it should say “The bottom panel”.
2. On page 263, Problem 6.3(e), it should start with:

Let $X_i \stackrel{\text{indep}}{\sim} \text{Lap}(0, s_i)$

instead of:

Let $X_i \sim \text{Lap}(0, s_i)$.

Chapter 7 (Unbiased Point Estimation and Bias Reduction)

1. On page 279, in the statement on Lehmann and Scheffé Minimal Sufficiency, the latter word was misspelled as “Sufficieny”.
2. On page 302, second to last line, in $\mathbb{E}[\hat{\theta}^*] = n\mathbb{E}[T] - (n-1)\mathbb{E}[T_1]$, T_1 should be $T_{(1)}$.
3. On page 308, Problem 7.13(d), $\sum_{i=1}^n T^{(i)}$ should be $\sum_{i=1}^n T_{(i)}$.
4. On page 311, Problem 7.17(b), the statement “based in the unbiased estimate X_1 ” should read: “based on the unbiased estimator X_1 ”.

Appendix A (Review of Fundamental Concepts in Probability Theory)

1. On page 429, between equations (A.61) and (A.62), $\mathbb{V}(X_1 + X_2)$ should be $\mathbb{V}(X_1 - X_2)$.