Corrections in A First Course in Linear Model Theory, Second edition by Ravishanker, Chi, and Dey

1. p. 71. In the last line of the proof of Result 3.1.9, change "it is seen that $\mathbf{AGA}$ is symmetric" to "it is seen that $\mathbf{AGA}'$ is symmetric".

2. p. 71. In Result 3.1.10, assume that $\mathbf{A}$ and $\mathbf{B}$ are *symmetric*, n.n.d. $n \times n$ matrices.

3. p. 81, last line of Result 3.3.2. Change the right side to $-\mathbf{c}'\mathbf{x}^* - \frac{1}{2}\mathbf{b}'\boldsymbol{\lambda}^*$.

4. p. 89, line 8. We must have $E(Y^*)$ instead of Y^*.

5. p. 175. Exercise 5.6, line 4. Change $2c_1c_2\rho\sigma_{12}$ to $2c_1c_1\rho\sigma_1\sigma_2$.

6. p. 178. In Exercise 5.27, it should be $\chi^2(m, \boldsymbol{\mu}'\mathbf{A}\boldsymbol{\mu}/2)$.

7. p. 178. In Exercise 5.33(a), derive the distribution of $\mathbf{y} = \mathbf{B}\mathbf{x}$.

8. p. 206. In Result 7.2.3, after "under H" insert: where the coefficient of determination is defined by $R^2 = SSR_c/SST_c = 1 - \frac{SSE}{SST_c}$. Also, in the proof, change $SSE_H = SST$ to $SSE_H = SST_c$, and remove the phrase "and Definition 4.2.4" after " From (7.2.9)".

9. p. 216. Interchange B and C in the vertices of the triangle in Figure 7.3.1.

10. p. 238. In line 4 of Result 8.1.1, change "we obtain the MLEs of $\boldsymbol{\beta}$ and $\widehat{\sigma}^2_{ML}$" to "we obtain the MLEs of $\boldsymbol{\beta}$ and σ^{2}".

11. p. 239. In (8.1.3), the power of Λ should be $-2/N$, not $-N/2$.

12. p. 241. In Equation (8.1.5), change the first term on the right side to $N \log(2\pi\widehat{\sigma}^2_{ML})$.

13. p. 241. Two lines above equation (8.1.7), insert a right bracket) after $(\widetilde{\boldsymbol{\beta}}_{ML}, \widetilde{\sigma}^2_{ML}$. Also, delete $\sim$ before χ^2_{N-p}.

14. p. 257. In Result 8.3.5, replace $r_i^2/(N - \mathrm{r}(\mathbf{X}) - 1)$ by $r_i^2/(N - \mathrm{r}(\mathbf{X}))$.

15. p. 272. In Exercise 8.5(b), change $N - p$ and $N - p + 2$ to $N - r$ and $N - r + 2$ respectively.

16. p. 272. In Exercise 8.11(b), change $N - p$ to $N - \mathrm{r}(\mathbf{X})$.

17. p. 280. Line above (9.1.16), change "H_0: $\beta_1 = \ldots = \beta_k = 0$" to "$H_0$: $\beta_0 = \ldots = \beta_k = 0$".

18. p. 303. In Exercise 9.11, change "MLR model $Y_i = \beta_0 + \sum_{j=1}^{k} \beta_j X_{ij} + \varepsilon_i$" to "MLR model $Y_i = \sum_{j=1}^{k} \beta_j X_{ij} + \varepsilon_i$".

19. p. 343. In Example 11.1.3, change "Mixed-effects model!two-factor model" to "[Mixed-effects two-factor model".

20. p. 327. In the Step-down procedure, replace "reject all $H_{(i)}$ with $i < R$" by "reject all $H_{(i)}$ with $i \leq R$".

21. p. 479. Two lines below (C.8), change "unction" to "function".

22. p. 485. Multiply the matrix $\boldsymbol{\Sigma}$ by 2.