ERRATA

for *Semiparametric Regression with R*

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Note: Most of these items are errata due to author oversight. However, those denoted by ★ are corrections in code chunks due to software updates since the book was published. The SOFTWARE UPDATES document for this book has further details on such items.

- page 26, line 5. In equation (2.16)

  $$\widehat{\text{st.dev.}}\{\widehat{f}(x)-f(x)\}=\widehat{\sigma}_\varepsilon\,\boldsymbol{C}_x\left(\boldsymbol{C}^T\boldsymbol{C}+\frac{\widehat{\sigma}_\varepsilon^2}{\widehat{\sigma}_u^2}\boldsymbol{D}\right)^{-1}\boldsymbol{C}_x^T$$

  should be

  $$\widehat{\text{st.dev.}}\{\widehat{f}(x)-f(x)\}=\widehat{\sigma}_\varepsilon\sqrt{\boldsymbol{C}_x\left(\boldsymbol{C}^T\boldsymbol{C}+\frac{\widehat{\sigma}_\varepsilon^2}{\widehat{\sigma}_u^2}\boldsymbol{D}\right)^{-1}\boldsymbol{C}_x^T}.$$

- page 48, Figure 2.13. In the first acf plot the light brown vertical line segment should not be present.

- page 58, last line before Figure 2.18.

  "right-handpanel" should be "right-hand panel".

- ★ page 75. In the last code chunk

  ```
  > fit1GLMBostMort <- glm(deny ~ black,family = binomial,
  +                        data = BostonMortgages)
  ```

  should be

  ```
  > BostonMortgages$denyBinary <-
  +              as.numeric(BostonMortgages$deny == "yes")
  > fit1GLMBostMort <- glm(denyBinary ~ black,family = binomial,
  +                        data = BostonMortgages)
  ```

- ★ page 76. In the last code chunk
  `deny ~`
  should be
  `denyBinary ~`
  assuming that the `BostonMortgages$denyBinary` assignment, given above for the page 75 erratum, has occurred.

- ★ page 77. In the last code chunk
  `deny ~`
  should be
  `denyBinary ~`
  assuming that the `BostonMortgages$denyBinary` assignment, given above for the page 75 erratum, has occurred.

- page 82, last line before Section 3.3.1.

  "`BostMortfit.R` within the `HRW` package"
  should be
  "`BostMortGAMfit.R` within the `HRW` package"

- ★ page 90. In the last code chunk
  `deny ~`
  should be
  `denyBinary ~`
  assuming that the `BostonMortgages$denyBinary` assignment, given above for the page 75 erratum, has occurred.

- ★ page 93. In the code chunk starting on the 14th line
  `deny ~`
  should be
  `denyBinary ~`
  assuming that the `BostonMortgages$denyBinary` assignment, given above for the page 75 erratum, has occurred.

- page 101, second line of the lower code chunk:
  `fitCOSSO <- cosso(X,mathscr,scale = TRUE)`
  should be
  `fitCOSSO <- cosso(X,mathScore,scale = TRUE)`

- ★ page 110, line 8 of Section 3.5.
  `family = gaussianff`
  should be
  `family = uninormal`

- ★ page 111, line −5.
  `residuals(fitVGAMCaschool)`
  should be
  `residuals(fitVGAMCaschool)[,c(1,3)]`

- ★ page 115, last code chunk.

```
> fit2GAMWarsaw <- gam(areaPerMzloty ~ as.factor(district) +
+                    s(construction.date,k = 25,by = district)
+                    + as.factor(n.rooms) + s(surface,k = 25),
+                    data = WarsawApts,method = "REML")
```

  should be

```
> fit2GAMWarsaw <- gam(areaPerMzloty ~ as.factor(district) +
+                      s(construction.date,k = 25,by = as.factor(district))
+                      + as.factor(n.rooms) + s(surface,k = 25),
+                      data = WarsawApts,method = "REML")
```

- ★ page 117. In the last code chunk
  `deny ~`
  should be
  `denyBinary ~`
  assuming that the `BostonMortgages$denyBinary` assignment, given above for the page 75 erratum, has occurred.

- page 117. In the last code chunk
  `+ pbcr + self + single + s(ccs,k = 4),`
  should be
  `+ pbcr + single + s(ccs,k = 4),`
  since the term `factor(self)` appears three lines earlier.

- page 118. In the output near the top of the page, the line:
  `selfyes 0.0000 0.0000 NA NA`
  should be removed.

- ★ page 127. In the code chunk of exercise number 10
  `deny ~`
  should be
  `denyBinary ~`
  assuming that the `BostonMortgages$denyBinary` assignment, given above for the page 75 erratum, has occurred.

- page 203, line -5.

$$\sum_{k=1}^{K} \lambda_k \psi_k(t) \psi_k^T(t), \ \ s,t = t_1, \ldots, t_d.$$

  should be

$$\sum_{k=1}^{K} \lambda_k \psi_k(s) \psi_k^T(t), \ \ s,t = t_1, \ldots, t_d.$$

- page 279, line 12.
  "where $\sigma_u, \ \sigma_\beta, \ A_\varepsilon, \ A_u, \ A_x, \ A_w > 0$ are hyperparameters"
  should be
  "where $\sigma_\mu, \ \sigma_\beta, \ A_\varepsilon, \ A_u, \ A_x, \ A_w > 0$ are hyperparameters"

- page 288, lines 3–4.
  "It provides, for example, a Bayes estimate of 0.95 for the 44th true baseline score, and corresponding 95% credible set of $(0.0184, 1.89)$."
  should be
  "It provides, for example, a Bayes estimate of 0.977 for the 44th true baseline score, and corresponding 95% credible set of $(0.0728, 1.95)$."

- page 290, equation (6.34).

$$w_i \overset{\text{ind.}}{\sim} N(\alpha_0 + \alpha_1\, x_i, \sigma_w^2)$$

should be

$$w_i | \alpha_0, \alpha_1, \sigma_w^2, x_i \overset{\text{ind.}}{\sim} N(\alpha_0 + \alpha_1\, x_i, \sigma_w^2)$$

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