
Errata: Understanding Computational Bayesian Statistics

Page	Ch.	line	Correction
41	2	8	"... second envelope at the candidate value."
44	2	24	Equation should read $g(\theta y) = e^{-\frac{1}{2}(\theta-4)^2}.$
46	2	2	Equation should read $g_0(\theta) = \frac{1}{\sqrt{2\pi \times 3}} e^{-\frac{1}{2 \times 3^2}(\theta-4)^2}$
51	3	10	Equation should read $= \int_{\theta_l}^{\theta_u} g(\theta y_1, \dots, y_n) d\theta.$
58	3	13-15	"If it does not we reject the null hypothesis at the level α . If it does, we cannot reject the null hypothesis and conclude θ_0 remains a credible value."
59	3	13	"... credInt."
59	3	15	Equation should read $H_0 : \theta \leq 0 \text{ vs. } H_1 : \theta > 0$
59	3	17	"... pNull."
59	3	29	"... credInt."
59	3	33	"... pNull."

Page	Ch.	line	Correction
60	3	9	"... credInt."
60	3	12	Equation should read $H_0 : \theta \leq 0$ vs. $H_1 : \theta > 0$
60	3	15	"... pNull."
60	3	24	"... credInt."
60	3	27	Equation should read $H_0 : \theta \leq 0$ vs. $H_1 : \theta > 0$
60	3	29	"... pNull."
71	4	7	Equation should read $\propto \pi^{a-1} (1 - \pi)^{b-1} \times \pi (1 - \pi)^y$
71	4	25	" ... the binomial probability of $r - 1$ successes in $r + y - 1$ trials."
75	4	19	Equation should read $f(y \mu) = \frac{1}{\sqrt{2\pi}\sigma} e^{-\frac{1}{2\sigma^2}(y-\mu)^2}$
77	4	12	"... variance $\sigma_y^2 = \frac{\sigma^2}{n}$."
87	4	3	"It is given by."
89	4	12-13	"...multiplied by their respective precision matrices"
92	4	16	"Find the posterior mean and standard deviation of π ."

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103	5	9	"... previous values of the process by using ..."
103	5	13	Equation should read $P(X^{(2)} = x_2, X^{(1)} = x_1, X^{(0)} = x_0) = \dots$
107	5	10	"This is $\alpha^{(0)}$ times the j^{th} column ..."
107	5	17	"Note, the i^{th} row of the K by K identity matrix \mathbf{I} ..."
107	5	18	"... \mathbf{I} is the K by K identity matrix."
124	5	26	Equation should read $\mathbf{P} = \begin{bmatrix} .4 & .3 & .2 & .1 \\ .2 & .3 & .2 & .3 \\ .3 & .3 & .2 & .2 \\ .1 & .3 & .2 & .4 \end{bmatrix}$
130	6	30	" ... Hastings algorithm. See Chib and Greenberg (1995).
135	6	16	"Let the starting value be $\theta = .4448$.
138	6	30	Equation should read $g(\theta_1, \theta_2) \propto e^{-\frac{1}{2(1-.9^2)}(\theta_1^2 - 2 \times .9 \times \theta_1 \theta_2 + \theta_2^2)}.$
139	6	10	"... value $(\theta_1, \theta_2) = (2.0000, 2.0000)$."
142	6	16	Equation should read $g(\theta_1, \theta_2) \propto e^{-\frac{1}{2(1-.9^2)}(\theta_1^2 - 2 \times .9 \times \theta_1 \theta_2 + \theta_2^2)}.$
142	6	18	Equation should read $q_2(\theta'_1, \theta'_2) \propto e^{-\frac{1}{2 \times 1.2^2}((\theta'_1)^2 - 2 \times .9 \times \theta'_1 \theta'_2 + (\theta'_2)^2)}.$
146	6	9	Equation should read $g(\theta_1, \theta_2) \propto e^{-\frac{1}{2(1-.9^2)}(\theta_1^2 - 2 \times .9 \times \theta_1 \theta_2 + \theta_2^2)}.$

Page	Ch.	line	Correction
150	6	6	Equation should read $g(\theta_1, \theta_2) \propto e^{-\frac{1}{2(1-\rho^2)}(\theta_1^2 - 2 \times .9 \times \theta_1 \theta_2 + \theta_2^2)}.$
150	6	10	Equation should read $m_2 = \rho\theta_1 \text{ and } s_2^2 = (1 - \rho^2).$
154	6	6	normMixMH
154	6	10	normMixMH
154	6	20	normMixMH
154	6	27	normMixMH
155	6	3	normMixMH
155	6	7	normMixMH
155	6	12	"Form histograms of the two samples. Do they resemble ..."
155	6	18	normMixMH
155	6	25	normMixMH
155	6	35	normMixMH

Page	Ch.	line	Correction
156	6	2	normMixMH
156	6	7	"Form histograms of the two samples. Do they resemble ..."
156	6	13	normMixMH
156	6	20	normMixMH
175	7	23	normMixMH
175	7	31	normMixMH
176	7	7	normMixMH
176	7	14	normMixMH
219	9	16	Equation should read $\mathbf{V}_1^{-1} = \mathbf{V}_0^{-1} + \mathbf{V}_{ML}^{-1}$
226	9	1	"Looking at Table 9.4 ..."
226	9	26	"... are shown in Table 9.5."

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236	10	14	" are the joint likelihood and the joint prior density"
239	10	4	" <i>chi-sq</i> 11 df"
239	10	15	"...and letting $\mu = 20 + z \times 5 = 16.068$."
242	10	4	" <i>chi-sq</i> 11 df"
249	10	25	"... have a sample of experimental units and that we..."
249	10	28	Equation should read
			$\mathbf{y}_j = \begin{pmatrix} y_{1j} \\ \vdots \\ y_{n_j j} \end{pmatrix}.$
246	10	6	"We consider the populations to be related ..."
250	10	21	"We will use a <i>multivariate normal</i> ($\mathbf{b}_0, \mathbf{B}_0$)"
251	10	0	Equation should read
			$m_1 = \frac{\frac{1}{V_0}}{\frac{1}{V_1}} \times m_0 + \frac{\frac{J}{\psi}}{\frac{1}{V_1}} \times \bar{\mu}$
252	10	9/10	" ... group means from the hypermean."
252	10	23	"... ($\mathbf{y}_j \mu_j, \boldsymbol{\beta}, \sigma^2$) is <i>multivariate normal</i> ($\mu_j + \mathbf{X}_j \boldsymbol{\beta}, \sigma^2 \mathbf{I}$)."
255	10	11	β_2 2.382 6.776 -10.91 15.68
259	10	9	" ...or the R-function <code>normGibbs</code> to run ..."
261	10	8	"We show that using an improper Jeffrey's prior..."

Page	Ch.	line	Correction
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308	bib.	3	Insert
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10. Chib, S., and Greenberg, E. (1995), Understanding the Metropolis-Hastings Algorithm, *The American Statistician*, Vol. 49, No. 4 pp. 327-335.

and renumber rest of references