Errata for *Computer Vision: Algorithms and Applications*

found by the Japanese translators of the Japanese edition

January 2, 2013

Hardcopy p.#	Online Sept. 3, 2010	Equation	Correction
12	13	"Hardware impl."	(see Section C.2) ⇒ Appendix
22	24	Chap. 9	example of *computational photography*
32	35	below (2.12)	$det(\boldsymbol{L}) = 0 \Rightarrow \det(\boldsymbol{L}) = 0$ or $\|\boldsymbol{L}\| = 0$
32,33	35	above (2.12) and below (2.13)	Hartley and Zisserman 2004, Chapter 2 ⇒ Chapter 3
34	37	Hier. of 2D trans.	"a subset of the more complex group" ⇒ subgroup
34	37	above (2.22)	$\boldsymbol{x}' = \tilde{\boldsymbol{H}}\boldsymbol{x} \Rightarrow \tilde{\boldsymbol{x}}' = \tilde{\boldsymbol{H}}\tilde{\boldsymbol{x}}$
35	38	planar surface flow	$y' = a_3 + a_4 x + a_5 y + a_7 x^2 + a_6 xy \Rightarrow a_6 xy + a_7 y^2$
36	39	above (2.23)	Hartley and Zisserman (2004, Section 2.4) ⇒ Section 3.4
48	54	footnote 2	"non-integral" ⇒ "non-integer"
53	59	(2.79)	x' and y' in the right hand sides ⇒ $\hat{x}$ and $\hat{y}$
63	70	below (2.97)	e.g., from $^1/_{125}$ to $^1/_{250}$ ⇒ from $^1/_{250}$ to $^1/_{125}$
92	105	3rd para. sec. 3.1.2	Figure 2.32g–i ⇒ Figure 2.32f–h
96	109	next para. below (3.9)	Figure 3.7d shows ⇒ Figure 3.7e shows
96	109	next para. below (3.9)	in Figure 3.7e ⇒ in Figure 3.7f
105	119	next para. below (3.28)	$\nabla_{\hat{\boldsymbol{u}}} \cdot \nabla_{\hat{\boldsymbol{u}}} G_{\hat{\boldsymbol{u}}} \Rightarrow \nabla_{\hat{\boldsymbol{u}}} G_{\hat{\boldsymbol{u}}}$ or $\nabla_{\hat{\boldsymbol{u}}} \nabla_{\hat{\boldsymbol{u}}} G$
111	126	(3.39)	remove "$\lambda =$"
112	127	2nd para. before sec. 3.3.2	remove ")" of "and 3.7.2)."
117	133	(3.50), Fig 3.24	$e^{j\omega x + \phi} \Rightarrow e^{j(\omega x + \phi)}$
121	138	(3.59)	$LoG \Rightarrow$ LoG
124	142	next para. below (3.74)	$P(f) \Rightarrow P_s(f)$
132	150	2nd para. sec.3.5.3	(Figure 3.33) ⇒ (Figure 3.32)
134		3rd para. sec.3.5.3	the base-level Gaussian (L_2 in Figure 3.34b) ⇒ L_1
138	157	para. in sec. 3.5.4 (below Fig.3.38)	The same applies to filtering the even sequence ⇒ odd
140		last para. sec.3.5.4	Figure 3.40b illustrates ... ⇒ 3.40d
156		below (3.102)	where $\boldsymbol{x} = [...]$ is ⇒ $\boldsymbol{x} = (...)$
158		above (3.106)	the *posterior* distribution for a given set of measurements $\boldsymbol{y}$, $p(\boldsymbol{y}\|\boldsymbol{x})$, ⇒ $p(\boldsymbol{x}\|\boldsymbol{y})$
160	181	(3.109)	$\mathcal{N} \Rightarrow \mathcal{N}(i, j)$
169	192	1st para. sec.3.8	the IEEE International Conference on Image Processsing
172	195	Ex.3.3	remove ")" from "... Sectoin 3.1.3) or ..."
188	212	"Förster–Harris" para.	While Anandan (1989) and Kanade ...
203	232	(4.18)	$\frac{\|D_A - D_B\|}{\|D_A - D_C\|} \Rightarrow \frac{\|D_A - D_B\|}{\|D_A - D_C\|}$
212	240	(4.22)	$[\nabla^2 G_\sigma](\boldsymbol{x}) * I(\boldsymbol{x})]. \Rightarrow [\nabla^2 G_\sigma](\boldsymbol{x}) * I(\boldsymbol{x}).$
277	313	footnote 3	a different variance or certainty ⇒ uncertainty
	314	(6.11) and above	$\Sigma_i^{-1} \Rightarrow \boldsymbol{\Sigma}_i^{-1}$
281	318	below (6.26)	$w(r) = \Psi(r)/r \Rightarrow w(r) = \psi(r)/r$
282	320	1st para. in "Uncertainty modeling"	(6.10) and 6.11) ⇒ (6.10) and (6.11)
285	323	below (6.37)	triangle Δ ⇒ triangle $\triangle$
290	329	below (6.49)	Hartley and Zisserman 2004, Section 7.5 ⇒ Section 8.5
291	330	(6.51)	$...(x_i - c_x)(x_j - c_y) + ... \Rightarrow ...(x_i - c_x)(x_j - c_x) + ...$
291	330	below (6.51)	Hartley and Zisserman 2004, Section 7.6 ⇒ Section 8.6
291	330	Figure 6.9	$(\hat{x}_i, \hat{x}_j) \Rightarrow (\hat{\boldsymbol{x}}_i, \hat{\boldsymbol{x}}_j)$
307	348	Figure 7.3	x and 0 in the left camera image should be x_0
309	350	(7.18)	add a period at the end of Eq.(7.18)
309	350	(7.20)	$\det\|\alpha \boldsymbol{E}_0 + (1 - \alpha)\boldsymbol{E}_1\| = 0 \Rightarrow$ remove det
310	351	below (7.25)	(Hartley and Zisserman 2004, p. 240) ⇒ p. 259
313	354	footnote 8	Hartley and Zisserman (2004, p. 237) ⇒ p. 256
314	355,356	above (7.35)	Hartley and Zisserman (2004, p. 456) ⇒ p. 472
315	358	above (7.40)	weak perspective ⇒ scaled orthographic
317	359	below (7.45)	the 3×1 rows ⇒ the 1×3 rows
317	359	below (7.45)	... equal to s_j and ... ⇒ s_j^2
319	362	3rd para. in 7.3.2	Cremers 2009). Another
321	364	above (7.51), and (7.52), (7.55)	$\Sigma_{ij} \Rightarrow \boldsymbol{\Sigma}_{ij}$
333	378	Ex 7.2	least media squares (LMS), ⇒ least median of squares (LMS),

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	389	(8.17)	$e^{-ju\cdot\boldsymbol{\omega}} \Rightarrow e^{-j\boldsymbol{u}\cdot\boldsymbol{\omega}}$
	390	(8.25)	$e^{-2\pi ju\cdot\boldsymbol{\omega}} \Rightarrow e^{-2\pi j\boldsymbol{u}\cdot\boldsymbol{\omega}}$
344	391	(8.31)	$I_0(s,\theta) \Rightarrow \tilde{I}_0(s,\theta)$
356	405	(8.68)	$w_{i,j} \Rightarrow w_{ij}$
361	411	below (8.71)	One popular choice for robust metrics in the L_1 norm ⇒ is
368	419	above sec. 8.5.2	One example of ... 2004) which is the one ⇒ One example of ... 2004) is the one
378	430	2nd para. sec. 9.1	a planar surfaced ⇒ surface
381	434	(9.10)	$(h_{00}, h_{01}, h_{02}, h_{00}, h_{11}, h_{12}, h_{20}, h_{21}) \Rightarrow h_{10}$
	442	footnote 9	$\Sigma_{ij}^{-1} \Rightarrow \boldsymbol{\Sigma}_{ij}^{-1}$
400	455	between (9.38) and (9.39)	alpha (translucency) ⇒ transparency
400		(9.40)	$l = ... \Rightarrow l(\boldsymbol{x}) = ...$
416	475	Fig 10.5	add missing (a)(b)(c)(d) from left to right.
	482	(10.8)	... $w(z_{i,j})[g(z_{i,j}) - ...] \Rightarrow w(z_{ij})[g(z_{ij}) - ...]$
430	489	below (10.18)	The attenuation function $I(x,y) \Rightarrow \Phi(x,y)$
449	512	(10.35)	$\Sigma_F \Rightarrow \boldsymbol{\Sigma}_F$
450	514	Fig 10.43	$\mu_k \Rightarrow \boldsymbol{\mu}_k$
451	514	below (10.40)	${}^{\epsilon}/_{\mathrm{M}}\boldsymbol{I} \Rightarrow {}^{\epsilon}/_{M}\boldsymbol{I}$
454	517	Fig 10.48	add missing (a)(b)(c)(d)(e) from left to right.
459	524	5th para. sec. 10.5.2	(Figure 10.55a–b) ... (Figure 10.55c–d) ⇒ Figure 10.55 (or add (a–b) in Fig.10.55)
471	538	Figure 11.3b	x and 0 in the left camera image should be x_0
474	541	below (11.3)	(Hartley and Zisserman 2004, A5.2) ⇒ A7.2
508		Fig. 12.1	(e–f) corresponding shape from shading ... ⇒ (e–h)
516	590	Fig. 12.8	merged with their (weights) bottom left ⇒ weights (bottom left)
518	592	2nd para. sec. 12.3.1	(Section 3.7.1 (3.94–3.98)) .[5]
524		Fig. 12.14	add (a) (b) (c) (d) below each figure
548		Fig. 13.4	add (c) below the right figure
553	630	Fig. 13.8	... coordinates u and $u' \Rightarrow u'$ and u''
566	646	footnote 12	remove "(" at the begining.
607	691	below (14.34)	inverted file → inverted index
607	691	above (14.35)	inverted file index → inverted index
624	711	sec.14.4.4 3rd para. from last	using an active shape model (Cootes, Edwards, and Taylor 2001; ... ⇒ (Cootes, Cooper, Taylor et al. 1995
630	718	sec.14.5.2 3rd para.	probabilistic latest semantic analysis (PLSA) ⇒ latent
638	726	Ex 14.5	"eye, nose, and face regions." ⇒ mouth
652		(A.28)	$\lvert\boldsymbol{a}_i\boldsymbol{x} - b_i\rvert^2 \Rightarrow \lvert\boldsymbol{a}_i^T\boldsymbol{x} - b_i\rvert^2$
659	751,752	(A.52)–(A.54)	$\hat{x} \Rightarrow \hat{\boldsymbol{x}}$
666	761	below (B.18)	$w(r) = \Psi(r)/r \Rightarrow w(r) = \psi(r)/r$
691	791	Abdel-Hakim, ... (2006).	color invariant characterstics ⇒ color invariant characteristics
693	794	Arbeláez, P., ... (2010).	Submitted to PAMI. ⇒ IEEE Transactions on Pattern Analysis and Machine Intelligence, PAMI-33(5):898–916 (2011).
	797	Bartels, R. H., ... (1987)	and Geeometric Modeling. ⇒ Geometric
699	802	Blake, ... (2010).	(2011). Markov Random Fields for Vision and Image Processing, MIT Press.
703	808	Capel, D. P. (2001).	*Super-resolution and Image Mosaicing* ⇒ *Image Mosaicing and Super-resolution*
707	813	Cootes, T. F. and Taylor, C. J. (2001).	In *Medical Imaging.* ⇒ In *SPIE Vol. 4322, Medical Imaging 2001: Image Processing*, pp. 236–248.
710	817	Davis, T. A. (2008).	(2011). Algorithm 915, SuiteSparseQR: Multifrontal multithreaded rank-revealing sparse QR factorization. *ACM Trans. on Mathematical Software*, 38(1): Article 8.
712	820	Diebel, J. (2006).	Representing Attitude: Euler Angles, Unit Quaternions, and Rotation Vectors.
717	827	Foley, van Dam, Feiner, Hughes (1995).	(1996) Computer Graphics: Principles and Practice. Addison-Wesley, Reading, MA, 2nd edition in C.
719	829	Furukawa, Y. and Ponce, J. (2011).	(2010). ... IEEE Transactions on Pattern Analysis and Machine Intelligence, PAMI-32(8): 1362–1376.
721	832	Golovinskiy, A. ... (2006).	ster, H. P., ⇒ Pfister, H.,
725	837	Hartley and Zisserman (2004)	Multiple View Geometry. 2nd Edition.
725	838	Hastie, T., Tibshirani, R., and Friedman, J. (2001).	(2009). ... Springer-Verlag, New York, 2nd edition.
729	843	Huynh, D. Q., ... (2003).	Outlier correcton ⇒ Outlier correction
736	853	Kumar, M. P., ... (2010)	(2011). ... *Journal of Machine Learning Research*, 12(1):3167.
736	853	Kumar, M. P., ... (2009)	H.S.Torr, P. ⇒ Torr, P. H. S.
748	870		Mičušìk, ... (2008). ⇒ Mičušík
742	861	Lischinski, D., ... (2006a) and (2006b)	Two are the same reference and hence merged into (2006)
753	876	Okutomi, M. and Kanade, T. (1994).	remove because this is an erroneous duplication of Kanade, T. and Okutomi, M. (1994).
762	889	Rousseeuw, P. J. (1984).	Least median of squares regresssion ⇒ regression
	899	Simoncelli, E. P. ... (1990b)	Subband Coding ⇒ Subband Image Coding
792	931		Zitov'aa, B. and Flusser, J. (2003). ⇒ Zitová
references			ABCD'20xx ⇒ ABCD20xx
references			ABCD-20xx or ABCD-9x ⇒ ABCD20xx or ABCD9x