O'REILLY®
Shop Books & Videos

Search

Your Account

Shopping Cart

| Home | Shop Video Training & Books | Radar | Safari Books Online | Conferences | IT Courses & Certificates |

| Video Training | Browse Subjects | New | Upcoming | Early Release | Bestselling | Ebooks | **1-800-889-8969 / 707-827-7019 / orders@oreilly.com** |

The shop.oreilly.com ebook advantage – DRM-free, lifetime access, multiple formats, sync with Dropbox   Learn More

Errata for *Learning OpenCV*

Submit your own errata for this product.

Print

CONFIRMED ERRATA   UNCONFIRMED ERRATA

The errata list is a list of errors and their corrections that were found after the product was released. If the error was corrected in a later version or reprint the date of the correction will be displayed in the column titled "Date Corrected".

The following errata were submitted by our customers and approved as valid errors by the author or editor.

Color Key: Serious Technical Mistake   Minor Technical Mistake   Language or formatting error   Typo   Question   Note   Update

Version	Location	Description	Submitted By	Date Submitted	Date Corrected
Printed	Page xiii 10th line	Next to the footprint icon, the text reads "Shows test that should be replaced with user-supplied values. his icon signifies a tip, suggestion, or general note." I believe the first sentence is an erroneous copy-paste of the text before and should be erased. Moreover, the first letter of the word "This" has been omitted in the second sentence. **Note from the Author or Editor:** Delete "Shows text that should be replaces with user-supplied values." Add "T" to "his icon" in beginning of next sentence.	Anonymous	Nov 04, 2008	Jul 22, 2011
Printed	Page x 6th paragraph. Who this book is for: teachers	3rd line of Teachers it says: "with current papers or guest lecturers from experts" it should say "with current papers or guest lectures from experts"	Anonymous	Nov 12, 2008	Jul 22, 2011
Printed	Page xiv the last paragraph	"in Napa's Mt. Vieder area" should be "in Napa's Mt. Veeder area".	Shiqi Yu	Feb 05, 2009	Jul 22, 2011
Safari Books Online	preface In section "P.5. Conventions Used in This Book"	http://proquest.safaribooksonline.com/9780596516130/preface In section "P.5. Conventions Used in This Book": You have "Shows text that should be replaced with user-supplied values. his icon signifies a tip, suggestion, or general note." which probably should be "Shows text that should be replaced with user-supplied values. This icon signifies a tip, suggestion, or general note." . Alex **Note from the Author or Editor:** Submitter is correct, please make the suggested change.	Anonymous	Feb 20, 2009	
Printed	Page xi First sentence of second paragraph	"All the program examples in this book are based on OpenCV version 2.0." This comment may be false, but I suppose we are making it true. In any case, we should update this to reflect what exactly is going on.	Anonymous	Jul 15, 2011	
PDF	Page 10 Paragraph 'MacOS X'	it should read '... to build and install OpenCV, update DYLD_LIBRARY_PATH ...' instead of	Anonymous	Oct 02, 2008	Jul 22, 2011

		'... to build and install OpenCV, update LD_LIBRARY_PATH ...' (see 'man dyld')			
Printed	Page 20 Code, 2/3rd way down	The comment in the code : // While loop (as in Example 2) capture & show video This causes an error, the "capture" needs to be replaced with "g_capture", as this version of the code creates a global variable, and is prefaced with a "g_". **Note from the Author or Editor:** Submitter is correct. I believe that this was in a previous erratum. In any case, please make the change indicated: replace 'capture' with 'g_capture'.	Anonymous	Oct 16, 2008	
Printed	Page 20 Example 2-3	Example 2-3 (adding a trackbar) does not work for me (Linux 2.6 opencv1 from ubuntu package). CV_CAP_PROP_FRAME_COUNT comes back as zero. I noticed cvGetCaptureProperty() doesn't work in general unless the first frame is read- but even then, the COUNT variable is zero. Perhaps there is some other trick to getting CV_CAP_PROP_FRAME_COUNT to work? From the number of message board posts about having trouble with cvGetCaptureProperty, I think a footnote here would help. Thank you, j **Note from the Author or Editor:** In my own experience, GetCaptureProperty essentially never works. How do we want to address this?	Justin L.	Jan 03, 2009	
Printed	Page 22 Example 2-4	missing curly bracket void example2_4(IplImage* image) ---> { <--- // ... **Note from the Author or Editor:** submitter is correct, please add '{' as described.	Christian Schwarte	Mar 26, 2009	
Printed	Page 24 Example 2-5	In Example 2-5, third to the last line cvPyrDown requires three parameters, in, out and filter (which is passed in the function as parameter). So this line should be cvPyrDown(in, out, filter) **Note from the Author or Editor:** Submitter is correct. He is referring to the line immediately before the code line "return(out);". Please make the indicated change.	Jitao David Zhang	Jun 30, 2009	
Printed	Page 25 Example 2-6 code section	The code: IplImage* out = cvCreateImage(cvSize(cvGetSize(in), IPL_DEPTH_8U, 1); does not compile. cvGetSize takes two arguments. It can be fixed thusly: IplImage* out = cvCreateImage(cvGetSize(in), in->depth, //IPL_DEPTH_8U, 1); This code is correct and compiles.	Anonymous	Oct 16, 2008	Jul 22, 2011
Printed	Page 27, 28 description of Example 2-10 (bottom of 27 and top of 28)	At the end of the sentence after Example 2-10, delete "same video in grayscale" and replace with "log-polar transformed video"	Anonymous	Jul 15, 2011	Jul 22, 2011
Printed	Page 29 3rd paragraph	4th line Cvcore contains ... should read Cxcore contains ...	Anonymous	Mar 27, 2009	Jul 22, 2011
PDF	Page 33 function expression	in function expression "cvMat* cvCreateMat (int rows, int cols, int type);" in my view, "cvMat" should be "CvMat"	Haojun Zhang	Mar 02, 2011	Jul 22, 2011
PDF	Page 37		Ashish	Aug 11, 2009	

	Page 37 1st paragraph	It seems that the authors of the book have written the book using LaTex. Kindly replace the following quotation remarks � and � by ". This will save the users from having to modify the code in order to compile it. **Note from the Author or Editor:** I do not find the issue the submitter describes on page 37. This is an interesting point however, which relates to the idea of a book being electronically published. Unlike with a print edition, it is possible to "cut and paste" from an electronic edition into a text editor. As a result, the use of the incorrect kind of quotation marks (i.e. typographical double-opening and double-closing quotation marks such as U+201C and U+201D) will cause problems. All quotation marks which appear in code fragments should be changed to double straight quotation marks (i.e. U+0022, which is the ASCII character 0x22).	P.Brick	Aug 11, 2008	
Printed	Page 38 first sentence of last paragraph	Change "(see Examples 3-1 and 3-3)" with "(see Examples 3-1 and 3-2)"	Anonymous	Jul 15, 2011	Jul 22, 2011
Printed	Page 40 Example 3-9	The example seems to be for a single-channel matrix, instead of a three-channel matrix. **Note from the Author or Editor:** Submitter is correct. Please change caption line for example 3-9 from "...in a three-channel matrix" to "...in a single-channel matrix"	Anonymous	Sep 03, 2009	
Printed	Page 40 Example 3-9	"for(col=0;" should be "for(int col=0;" **Note from the Author or Editor:** Confirmed, change as specified by the submitter.	Shiqi Yu	Dec 24, 2009	
Printed	Page 40 6th sentence, first full paragraph on page	Change "Although the CVMat structure" to "Although the CvMat structure"	Anonymous	Jul 15, 2011	Jul 22, 2011
Printed	Page 40 second sentence, last paragraph	Change "(or, more likely, cvArr*)" to "(or, more likely, CvArr*)"	Anonymous	Jul 15, 2011	Jul 22, 2011
Printed	Page 40 3rd sentence from bottom of last full paragraph (under Arrays of Points)	Delete "or an array with one row and n columns (3-by-1)" from the end of the sentence.	Anonymous	Jul 15, 2011	Jul 22, 2011
Printed	Page 48 Table 3-3	Function cvAnd and cvAnds are lost from Table 3-3. They are explained in Page 52. **Note from the Author or Editor:** This is correct. On page 48, in table 3-3, immediately before the line containing "cvAbs", please add the table entries (lines) "cvAdd","Elementwise addition of one array to another" and next: "cvAdds", "Elementwise addition of a scalar to an array"	Shiqi Yu	Dec 24, 2009	
Printed	Page 48 Description of cvAvgSdv (8th Function from top of table)	Change "Absolute value" to "Average value"	Anonymous	Jul 15, 2011	Jul 22, 2011

Printed	Page 49,50	Function definitions for absolute value functions should be
		
		void cvAbs(
		    const CvArr* src1, CvArr* dst
		);
		
		void cvAbsDiff(
		    const CvArr* src1, const CvArr* src2, CvArr* dst
		);
		
		void cvAbsDiffS(
		    const CvArr* src, CvArr* dst, CvScalar value
		);
			Anonymous	Oct 13, 2008	Jul 22, 2011

Printed	Page 54 C definition of cvCalcCovarMatrix	Instead of "void cvAdd(" it should be "void cvCalcCovarMatrix("	Anonymous	Feb 23, 2009	Jul 22, 2011
Printed	Page 56 4	Paragraph 4 is in direct contradiction with paragraph 5. Paragraph 4 states:	Chris Colbert	Jun 04, 2009	Jul 22, 2011

"... After conversion to the new data type, each pixel will be multiplied by the value scale..."

Paragraph 5 states:

"...multiplication by scale and addition of shift occurs before type conversion takes place."

Paragraph 5 is correct.

Note from the Author or Editor:
In fourth paragraph, second sentence, delete "After conversion to the new data type," and capitalize "each".

Combine the fifth paragraph with the fourth. Delete "Specifically" from second sentence of fifth paragraph and add ie. and () to sentence.

The corrected and combined paragraph will look like this:

"The second function of cvConvertScale() is to perform a linear transformation on the image data. Each pixel value will be multiplied by the value scale and then have added to it the value shift. The result will be converted to the data type of dst. It is critical to remember that, even though �Convert� precedes �Scale� in the function name, the actual order in which these operations is performed is the opposite (i.e. multiplication by scale and the addition of shift occurs before the type conversion takes place.)"

Printed	Page 56 code block under "cvConvert Scale" in middle of page	Delete code block: "void cvConvertScale(const CvArr* src, CvArr* dst, double scale = 1.0, double shift = 0.0);"	Anonymous	Jul 15, 2011	Jul 22, 2011
Printed	Page 59 First sentence of paragraph after Table 3-6	Change "...and we will not go into the subtleties of Bayer representations OF the CIE color spaces here." to "...and we will not go into the subtleties of Bayer representations AND the CIE color spaces here."	Anonymous	Jul 15, 2011	Jul 22, 2011
Printed	Page 62 Table 3-7	cvGEMM(A,A,1,NULL,0,D,0) should read cvGEMM(A,B,1,NULL,0,D,0) cvGEMM(A,A,1,C,1,D,0) should read cvGEMM(A,B,1,C,1,D,0)	Anonymous	Oct 18, 2008	Jul 22, 2011
Printed	Page 64 1st paragraph after the function declarations	The line "As with cvGetRow() ... indicates the selected column in arr." appears to have a pair of cut-n-paste typos. The line should read "As with cvGetCol() ... indicates the selected row in arr."	Scott A Thisse	Mar 12, 2009	Jul 22, 2011
Printed	Page 64 first sentence of second paragraph	Move the first sentence "The function cvGetDimSize() returns the size of a single dimension specified by index." to the end of the paragraph. Then insert "passed to cvGetDims()" after "If the array" in the new first sentence of the paragraph. The new paragraph will read: "If the array passed to cvGetDims()is either a matrix or an image, the number of dimensions returned will always be two. For matrices and images, the order of sizes returned by cvGetDims() will always be the number of rows first followed by the number of columns. The function cvGetDimSize() returns the size of a single dimension specified by index."	Anonymous	Jul 15, 2011	Jul 22, 2011

Printed	Page 65
	1st code block
		It's stated that cvGetSubRect(...) takes as it's second argument a CvArr* submat, where as it only takes CvMat *
		Note from the Author or Editor:
		Code should read:
		
		CvMat* cvGetSubRect(
		  const CvArr* arr,
		  CvMat* submat,
		  CvRect rect
		);
			Anonymous	Oct 26, 2008	Jul 22, 2011

Printed	Page 65 First paragraph after first code block	In first sentence, change "cvGetColumns()" to "cvGetCols()"	Anonymous	Jul 15, 2011	Jul 22, 2011
Printed	Page 65 third code block (for cvInvert)	Change "Int" to "int" Code block will look like this: double cvInvert(	Anonymous	Jul 15, 2011	Jul 22, 2011

		const CvArr* src, CvArr* dst, int method = CV_LU);			
Printed	Page 66 cvMahalonobis section and end note	Change heading "cvMahalonobis" to "cvMahalanobis"and make the same change in the code block. Also change the three instances of this typo in the paragraph (and sentence after the paragraph) and delete (Mahal) from the first sentence of the paragraph. Correct the two instances of this typo in the note at the bottom of the page.	Anonymous	Jul 15, 2011	Jul 22, 2011
Printed	Page 69 Last word of first paragraph	Change last word of paragraph "cvCvtScale()" to "cvConvertScale()."	Anonymous	Jul 15, 2011	Jul 22, 2011

Printed	Page 69
	first line of cvNot code block (first code block on page)
		change first line of code block from "void" to "cvNot":
		
		void(
		 const CvArr* src,
		  CvArr* dst
		);
		
		to
		
		cvNot(
		   const CvArr* src,
		  CvArr* dst
		);
			Anonymous	Jul 15, 2011	Jul 22, 2011

Printed	Page 71 Last sentence on page	Change "The argument op controls..." to "The argument dim controls..."	Anonymous	Jul 15, 2011	Jul 22, 2011
Printed	Page 74 Last paragraph	The third sentence in the paragraph:"The closely related function cvSubS() does the same thing except that the constant scalar value is added to every element of src." should be "The closely related function cvSubS() does the same thing except that the constant scalar value is subtracted from every element of src." Also delete the first two sentences of the paragraph, so that the paragraph starts with "The closely related function"	Anonymous	Oct 14, 2008	Jul 22, 2011
Printed	Page 74 2nd paragraph (with heading and code block)	cvSub has been explained twice in subsection "cvSub" and "cvSub, cvSubS and cvSubRS" **Note from the Author or Editor:** Delete the heading cvSub, the code block and the paragraph following it. (the whole section for cvSub)	Shiqi Yu	Jul 13, 2009	Jul 22, 2011
Printed	Page 75 Line 13	"Singular value decomposition (SVD) is the decomposing of an m-by-m ..." should be "Singular value decomposition (SVD) is the decomposing of an m-by-n ..."	Shiqi Yu	Jul 13, 2009	Jul 22, 2011
Printed	Page 79 2nd Line	"The function CvSize is ..." should be "The structure CvSize is ...".	Scott A Thisse	Mar 12, 2009	Jul 22, 2011
Printed	Page 79 Bottom	In the section on Polygons the functions cvFillPoly and cvPolyLine take a parameter contours. The meaning and/or use of this parameter isn't discussed in the text. **Note from the Author or Editor:** Submitter is correct, please make the following clarifying insertion. On page 80, after the sentence "Similarly npts is an array of point counts, one for each polygon to be drawn." please insert this sentence: "contours indicates the number of such contours, i.e. the length of the array npts." [In this sentence, the first appearance of 'contours' as well as 'npts' are code references to variable names, they should be in Courier font and uncapitalized. The second appearance of 'contours' is the regular English word and should not be in Courier font.]	Tim Craig	Jun 03, 2009	
Printed	Page 80 second paragraph, first sentence	Change last word of sentence from "structures" to "arrays".	Anonymous	Jul 15, 2011	Jul 22, 2011
Printed	Page 83 Example 3-15.	In example 3-15: CvMat A = cvMat(5, 5, CV_32F, the_matrix_data); should be:	Guoqing Yan	Jan 28, 2010	

		CvMat A = cvMat(5, 5, CV_32F, the_matrix_data->data.ptr); **Note from the Author or Editor:** There is no technical mistake here, but the reader's confusion is noted. We can make the text a little more clear. Please make the following changes: 1) On p83 change "Suppose you had a 5-by-5 identity..." to "Suppose you had a 3-by-3 identity..." 2) In the code fragment following the line "Example 3-15. Saving and loading..." please insert the code line "float the_matrix_data[] = {1,0,0,0,1,0,0,0,1};" 3) In the following line in the code fragment, change "CvMat A = cvMat(5, 5, CV_32F, the_matrix_data);" to "CvMat A = cvMat(3, 3, CV_32F, the_matrix_data);"			

Printed	Page 87
	Example 3-20
		(original)
		char* libraries;
		char* modules;
		cvGetModuleInfo(0, &libraries, &modules);
		printf("Libraries: %s/nModules: %s/n", libraries, modules);
		
		'/' are backwards and libraries and modules must be typecast as const char **:
		
		(correction)
		char* libraries;
		char* modules;
		cvGetModuleInfo(0, (const char **) &libraries, (const char **) &modules);
		printf("Libraries: %s\nModules: %s\n", libraries, modules);
			Aaron Becker	Jan 14, 2009	Jul 22, 2011

Printed	Page 92 bottom of the page	The function cvSaveImage() has changed in version 2.0.0. The book as well as the online documentation of opencv has not yet been updated. int cvSaveImage(const char* filename, const CvArr* image); should be int cvSaveImage(const char* filename, const CvArr* image, const int* params); **Note from the Author or Editor:** An errata filed 3/2/2011 observes that as of 2.0, this has a third argument. Should we mention that? It defaults to zero anyhow, and seems to have no legitimate values other than zero. Also, is this now replaced by cv::imwrite?	Christoph Bober	Mar 02, 2011	

Printed	Page 98
	draw_box function,
	first block of code on page
		The above function takes two parameters as input, the second one being a CvRect struct which specifies the rectangle to draw. However, in the function itself the call to cvRectangle references box and makes no reference to rect. I think all of the references to box in this function should be references to rect.
		
		Also replace cvScalar with CV_RGB.
		
		Note from the Author or Editor:
		The first code block should look like this:
		//
		void draw_box(IplImage* img, CvRect rect) {
		  cvRectangle (
		    img,
		    cvPoint(rect.x, rect.y),
		    cvPoint(rect.x + rect.width, rect.y + rect.height),
		    CV_RGB(0xff,0x00,0x00) /* red */
		  );
		}
			John McDonald	Feb 02, 2009	Jul 22, 2011

Printed	Page 102 first line of code on page	change "Switch_callback" to "switch_callback"	Anonymous	Jul 15, 2011	Jul 22, 2011
Printed	Page 103 2nd paragraph	"...you can pass -1 to cvCreateCameraCapture(), which will cause OpenCV to open a window that allows you to select the desired camera." This is incorrect. As correctly stated on p26, a value of -1 means to just select the default camera. **Note from the Author or Editor:** Submitter is partially correct. Please insert the words "on some platforms" before the referenced text "...you can pass..." (thus it should read "...on some platforms, you can pass...")	Anonymous	May 13, 2009	
Printed	Page 110 Table 5-1	The brief description of the bilateral filter claims that the filter will: "Apply bilateral 3-by-3 filtering with color sigma=param1 and a space sigma=param2" It should read: "Apply bilateral param1xparam1 filtering with color sigma=param3 and space sigma=param4"	Robbie Shade	May 13, 2009	Jul 22, 2011

Printed	Page 110 1st paragraph	In first paragraph on page no. 110 under chapter 5: Image Processing, the name of function "cvSmooth()" is printed as "cv_Smooth()" in line "The cv_Smooth() function has four parameters ....".	Sagun Baijal	May 27, 2011	Jul 22, 2011
Printed	Page 110 Last sentence of second paragraph	Last sentence should read: Simple blur supports any number of image channels and works on 8-bit images or 32-bit floating-point images.	Anonymous	Jul 15, 2011	Jul 22, 2011
Printed	Page 110 Last sentence of first paragraph	Change "ST" to "smoothtype". The corrected sentence should read: (Please notice that for some values of smoothtype, �in place operation�, in which src and dst indicate the same image, is not allowed.)	Anonymous	Jul 15, 2011	Jul 22, 2011
Printed	Page 110 Table 5-1	Change table description to: Table 5-1. Types of smoothing operations, meaning of their parameters, and the depth and number of channels (Nc) supported by each operation. Change titles to: Smooth type Name In place Nc src depth dst depth Brief description Change Nc category in first and second row to "Any" and from "1,3" in third row to "1,3,4"	Anonymous	Jul 15, 2011	Jul 22, 2011
Printed	Page 116-117 Figures 5-6 and 5-7	Something is amiss with these two figures. My guess: Either region A in Figure 5-6 should be smaller (similar to region B in Figure 5-7) or the line styles (solid vs. dotted) is reversed for Region B. **Note from the Author or Editor:** Submitter is correct. This one has been annoying me for a while. The image in figure 5-6 is incorrect. The submitter is correct that the image on the left in 5-6 should be smaller. In fact however, there is no left hand side for the image in 5-6 which would make the right hand side of 5-6 correct either. This entire image needs to be redrawn and replaced. How do I submit a correction for a figure? Someone send me (Adrian) an e-mail and I will send you a replacement figure...	Scott A Thisse	Mar 12, 2009	
Printed	Page 116 Figure 5-6	In Figure 5-6 both Image A and A-morph-B are the same. Image A should be the lightly dotted interior figure in Image A-morph-B.	Chris Colbert	Jun 04, 2009	
Printed	Page 116 Note in middle of page	Change "Image morphology is often done on binary images..." to "Image morphology is often done on Boolean images..."	Anonymous	Jul 15, 2011	Jul 22, 2011
Printed	Page 116 second paragraph, last sentence	Change "...but these statements are generally true for the filled convex kernels typically used." to "...but these statements are generally true so long as the kernel is both convex and filled."	Anonymous	Jul 15, 2011	Jul 22, 2011
Printed	Page 118 first paragraph, third sentence	Change "binary to Boolean" in third sentence. Sentence should read: "Observe that if the image is not Boolean then the min and max operators play a less trivial role."	Anonymous	Jul 15, 2011	Jul 22, 2011
Printed	Page 121 first sentence on page	Change "binary" to "Boolean." Sentence should read: "Opening is often used to count regions in a Boolean image."	Anonymous	Jul 15, 2011	Jul 22, 2011
Printed	Page 124 first sentence on page	Change "lighter then" to "lighter than"	Anonymous	Jul 15, 2011	Jul 22, 2011
Printed	Page 124 End note	Change "not just a binary mask" to "not just a Boolean mask"	Anonymous	Jul 15, 2011	Jul 22, 2011
Printed	Page 125, 126 second full sentence and code block on 125, first sentence of 126	Change loDiff and upDiff to lo Diff and up Diff. (add a space)	Anonymous	Jul 15, 2011	Jul 22, 2011
Printed	Page 128 Figure 5-19	The caption of Figure 5-19: "hiDiff" should be "upDiff". Also add space between up/lo and Diff	Shiqi Yu	Dec 24, 2009	Jul 22, 2011

		Also Diff should be lowercase.			
Printed	Page 128 first sentence of note	Delete: "If the flood-fill mask is set to be marked, then it is marked with the values set in the middle bits (8-15) of the flags value (see text)." and replace with "If the flood-fill mask is passed by the user, then the mask pixels, corresponding to the repainted image pixels, are set to the value encoded in the middle bits (8-15) of the flags value (see text)."	Anonymous	Jul 15, 2011	Jul 22, 2011
Printed	Page 129 Lines 9 and 11	"lowDiff" should be "lo diff" (2 different instances of this in the sentence) line 9: upDiff should be up diff, loDiff should be lo diff	Shiqi Yu	Dec 24, 2009	Jul 22, 2011

Printed	Page 131
	2 code blocks on page
		The function prototypes for cvPyrDown and cvPyrUp list the third parameter, filter, as type IplFilter which as near as I can determine isn't defined. The actual prototypes in the software I have they are type 'int'.
		Note from the Author or Editor:
		Change "IplFilter" to "int"
		
		Code blocks should be:
		void cvPyrDown(
		  IplImage* src,
		  IplImage* dst,
		  int filter = IPL_GAUSSIAN_5x5
		);
		
		and
		
		void cvPyrUp(
		  IplImage* src,
		  IplImage* dst,
		  int filter = IPL_GAUSSIAN_5x5
		);
			Tim Craig	Jun 03, 2009	Jul 22, 2011

Printed	Page 136 Table 5-5	In table 5-5, the Operation for the threshold type CV_THRESH_TRUNC has a mistake (probably typo?), uses M instead of T, it should read: $dst\_i = (src\_i > T)\ ?\ T : src\_i$	None	Jan 20, 2009	
Printed	Page 136 Figure 5-23	The result line is truncated for some of the charts. It should rise to max_value after the last vertical dotted line in the "Threshold Binary" chart. It should fall to zero after the last vertical dotted line in the "Threshold Binary, Inverted" and "Threshold to Zero, Inverted" charts.	Scott A Thisse	Mar 13, 2009	
Printed	Page 138 First Line above Example 5-3	"cvADD()" should be "cdAdd()".	Scott A Thisse	Mar 13, 2009	Jul 22, 2011
Printed	Page 139 Description of Figure 5-24	Change "binary image" to "Boolean image" Text should read: "Binary threshold versus adaptive binary threshold: the input image (top) was turned into a Boolean image using a global threshold (lower left) and an adaptive threshold (lower right); raw image courtesy of Kurt Konolidge"	Anonymous	Jul 15, 2011	Jul 22, 2011
Printed	Page 145 Paragraph underneath Figure 6-1	Change paragraph to read: "We can, of course, express this procedure in the form of an equation. If we define the image to be I(x, y), the kernel to be G(i, j) (where 0 ≤ i ≤ Mᵢ � 1 and 0 ≤ j ≤ Mⱼ � 1, with Mᵢ, Mⱼ being the extent of the kernel in the x- and y-dimensions respectively), and the anchor point to be located at (ai, aj) in the coordinates of the kernel, then the convolution H(x, y) is defined by the following expression:" *(In Mᵢ, Mⱼ, ai, aj: i and j are subscripts)	Anonymous	Jul 15, 2011	Jul 22, 2011
Printed	Page 147 first paragraph, 4th sentence	Change "examine the upper right image in Figure 6-2" to "examine the upper left image in Figure 6-2"	Anonymous	Jul 15, 2011	Jul 22, 2011
Printed	Page 149 First paragraph, second sentence	Change "aperture_sizes" to "aperture sizes" and change code style to regular font	Anonymous	Jul 15, 2011	Jul 22, 2011
Printed	Page 150 last sentence of page (under Laplace)	Change "analog of" to "approximation to"	Anonymous	Jul 15, 2011	Jul 22, 2011
Printed	Page 160 third paragraph,	Change "fall naturally into the same number of categories" to "fall naturally	Anonymous	Jul 15, 2011	Jul 22, 2011

	third paragraph, third sentence	into the same number of bins"			2011
Printed	Page 166 cWarpAffline performance heading	Change "cVWarpAffline performance" to "cVWarpAffline performance"	Anonymous	Jul 15, 2011	Jul 22, 2011
Printed	Page 167 Third paragraph, last word	Change "srcTri[]" to "dstTri[]".	Anonymous	Jul 15, 2011	Jul 22, 2011
Printed	Page 168 code block above first paragraph	delete the last "}"	Anonymous	Jul 15, 2011	Jul 22, 2011
Printed	Page 169 2nd paragraph under Sparse affline transformations heading, last sentence	Change Ds to Dd	Anonymous	Jul 15, 2011	Jul 22, 2011
Printed	Page 169 third paragraph under Sparse affline transformations heading, second sentence	Change "(which does the transformation)" to "(which does the translation)"	Anonymous	Jul 15, 2011	Jul 22, 2011
Printed	Page 170 first code block	Delete + from fifth line of code. It should read: void cWarpPerspective(const CvArr* src, CvArr* dst, const CvMat* map_matrix, int flags = CV_INTER_LINEAR | CV_WARP_FILL_OUTLIERS, CvScalar fillval = cvScalarAll(0));	Anonymous	Jul 15, 2011	Jul 22, 2011
Printed	Page 171 last paragraph, second sentence	Change "As such, it cannot handle perspective transforms" to "As such, it does not conveniently handle perspective transforms"	Anonymous	Jul 15, 2011	Jul 22, 2011
Printed	Page 172 first paragraph	First sentence: delete the comma after "three-channel" Last sentence: change "four dimensions" to "three dimensions"	Anonymous	Jul 15, 2011	Jul 22, 2011
Printed	Page 172 third paragraph	Change paragraph to read: "Output of the code in Example 6-3 and in Example 6-4 are shown in Figure 6-14 for affine and perspective transformations. Compare this with the diagrams of Figure 6-13 to see how this works with real images. In Figure 6-14, we transformed the whole image." (add "Example 6-4" and delete the last two sentences)	Anonymous	Jul 15, 2011	Jul 22, 2011
Printed	Page 173, 174 various locations	p. 173 Last paragraph, last sentence: Change "That is, you can collect all the angles" to "That is, you could then collect all the angles" p. 174: first line: change "above a certain threshold" to some desired threshold" third line: change "then you can use the function" to "then you would use the function" Last line of first paragraph should read: "We would then fill a histogram from img_angle as long as the corresponding �pixel� in img_mag is above our desired threshold."	Anonymous	Jul 15, 2011	Jul 22, 2011
Printed	Page 174 second sentence of LogPolar section	Add "Next," to beginning of second sentence.	Anonymous	Jul 15, 2011	Jul 22, 2011
Printed	Page 177 First line under Discrete Fourier Transform (DFT) section	Change "is it" to "it is" in the first sentence. Should read: "For any set of values that are indexed by a discrete (integer) parameter, it is possible to define..."	Anonymous	Jul 15, 2011	Jul 22, 2011
Printed	Page 179 second paragraph	Paragraph should read: "In order to understand the last argument, nonzero_rows, we must digress for a moment to explain that in general, DFT algorithms will strongly prefer vectors of some lengths over other lengths, or arrays of some sizes over other sizes. In most DFT algorithms, the preferred sizes are powers of 2 (i.e., 2n for some integer n). In the case of the algorithm used by OpenCV, the preference is that the vector lengths, or array dimensions, be 2p3q5r, for some integers p, q, and r. Hence the usual procedure is to create a	Anonymous	Jul 15, 2011	Jul 22, 2011

		somewhat larger array and then use cvGetSubRect() to copy your array into the somewhat roomier zero-padded array. For convenience, there is a handy utility function, cvGetOptimalDFTSize(), which takes the (integer) length of your vector and returns the first equal or larger size which can be expressed in the form given (i.e. 2p3q5r)..."			
Printed	Page 182 fourth line on page	O(N2M2): the 2's should be superscript font	Anonymous	Jul 15, 2011	Jul 22, 2011
Printed	Page 183 3rd formula from the top	This formula states that the tilt_sum() calculation is tilt_sum(X,Y) = sum_{y <= Y} sum_{abs(x - X) <= y} image(x, y) but this is incorrect. The proper formula, given at the willowgarage website (http://opencv.willowgarage.com/documentation/cpp/imgproc_miscellaneous is tilted(X,Y) = sum_{y < Y} sum_{abs(x - X + 1) <= Y - y - 1) image(x, y) I have confirmed that the OpenCV code is actually performing the latter and can provide a small Python program demonstrating the difference. Note also that the previous formula refers to sqsum(X, Y) as "sum(X, Y)" and that "tilted" is the correct name of the argument to cvIntegral(). ◀ ▮ ▶	Robert R. Lewis	Mar 10, 2011	
Printed	Page 199 last line of code block	change "int dim_j_bin_j_upper_bound = histogram->thresh2[i][j+1];" to "int dim_i_bin_j_upper_bound = histogram->thresh2[i][j+1];"	Anonymous	Jul 15, 2011	Jul 22, 2011
Printed	Page 199 third paragraph in Basic Manipulations with Histograms	change "CvHistogram()" to "CvHistogram" (delete parentheses)	Anonymous	Jul 15, 2011	Jul 22, 2011
PDF	Page 201 Last line, the mathematical formula	There is an error in the correlation mathematical formula in the denominator: A summation is missing, it must be sqrt(sum(H1'�)*sum(H2'�)) in the denominator (the second summation is missing in the book, or at least, in the PDF version).	Dexter00	Apr 24, 2009	

PDF	Page 204
	code
		cvNormalizedHist(hist[i], 1.0); //Normalize it
		according to the description of the first paragraph,page 205,
		this normalization should be comment out
		
		Note from the Author or Editor:
		sybmitter is correct, this line should be commented out in the code (i.e. preceeded by '//')
			Anonymous	Dec 17, 2008	

Printed	Page 204 Code	cvNormalizeHist(hist[i], 1.0); // Normalize it The above is incorrect, as hist is a pointer to a CvHistogram, rather than an array of histograms. Further more, there is no variable 'i' to index any array. **Note from the Author or Editor:** The submission is correct. On the line idicated the characters "hist[i]" should be changed to simply read "hist" (i.e. the "[i]" should be removed.)	IanLee1521	Sep 20, 2010	
Printed	Page 206 Figure 7-5 description	Should read as follows: "Histogram of flesh colors under indoor (upper left), sunlit outdoor (middle left), and shaded outdoor (lower left) lighting conditions; the middle and right-hand columns display the associated BGR and HSV histograms, respectively."	Anonymous	Jul 15, 2011	Jul 22, 2011
Printed	Page 207 second sentence of Earth Mover's Distance section	The sentence beginning with "If instead of a histogram match..." is hard to parse. The sentence also contains a typo (or a cut-and-paste error): "...when the second histogram has shifted its been by...". **Note from the Author or Editor:** Replace "If instead of a histogram match measure we used a histogram distance measure, then we could still match like histograms to like histograms even when the second histogram has shifted its been by looking for small distance measures." with: "The difficulty with histogram match measures is that they can return a large difference in the case where two histograms are similarly shaped, but only displaced relative to one another. It is often desirable to have a distance measure which performs like a match, except which is less sensitive to such displacements."	Anonymous	Oct 18, 2008	Jul 22, 2011

Type	Location	Description	Submitter	Date	Date2
Printed	Page 208 Line 6 of the 2nd paragraph	"[537,7;43,11]" should be "[537,7,43,11]". The semicolon should be a comma.	Shiqi Yu	Feb 06, 2009	Jul 22, 2011
Printed	Page 209 3rd paragraph	Paragraph 3 sentence 3 states: "The image or array back_project is a single-channel 8-bit or floating point image of the same size as the input images in the array." In actuality the array back_project must be the same type as images in the input arrays. **Note from the Author or Editor:** The submitter's question implies that this fact is not obvious. That seems like reason enough to me to provide some clarification. Could we add a parenthetical at teh end of the referenced sentence reading: "(the type of back_project must match the type of image)". Please further note that 'back_project' and 'image' in the parenthetical are code references to the specific variable names in the function declaration, and therefore should be in Courier font (as is 'back_project' in the referenced sentence.)	Chris Colbert	Jun 04, 2009	
PDF	Page 215 formula bottom of page	The formular for the Cross Correlation shows, that the product of the template and image must be squared. But that's wrong. See: http://opencv.willowgarage.com/documentation/image_processing.html#matc **Note from the Author or Editor:** I can�t say I understand this person�s remark, but in discussion of Kouichi�s comments, it is clear that the change required is to remove the �squared� on the right hand side.	Anonymous	Jul 23, 2009	
Printed	Page 215 n the CV_TM_CCOEFF template matching formula	in the CV_TM_CCOEFF template matching formula, the sum should be above the division mark and not under as it is. **Note from the Author or Editor:** I believe that this is correct. i.e. that the transcription from the �serialized� equation (which can be found on the opencv web page) is not correct: �1/(w.h).Sum(�)� is not intended to imply that the sum is in the denominator, but rather that the entire sum is multiplied by �1/(w.h)� (i.e. normalized). [Vadim verified this assertion] Also, the first equation in this set has a �squared� on the right hand side which should be removed (same error as CV_TM_CCORR above).	Anonymous	Mar 31, 2011	
Printed	Page 215 third sentence on page	Change "rimages" to "images" in the beginning of the third sentence.	Anonymous	Jul 18, 2011	Jul 22, 2011
Printed	Page 216 4th formula in the page.	Formula for the normalization coefficient contains the summation of I values over x' and y' translated by (x,y). I(x+x', y+y') should be under the summation sign as opposed to I(x+x', y+x') as printed.	Vytautas Vaitukaitis	Mar 22, 2011	
Printed	Page 217 eighth line in first paragraph (after the note)	Change "...or minimum (for square-difference) matching methods." to "...or minimum (for square-difference matching methods)."	Anonymous	Jul 18, 2011	Jul 22, 2011
PDF	Page 218 end note	"you can immediately see that a good match ......while a poorer score of 0.20 is reduced substantially (0.50^5=0.03)." should the value 0.20 here be 0.50?	Anonymous	Dec 18, 2008	Jul 22, 2011
Printed	Page 218 second line of paragraph (under code block)	change "(recall that..." to ". Recall that.."	Anonymous	Jul 18, 2011	Jul 22, 2011
Printed	Page 223 second line of third paragraph	Change "You must be aware of an important feature of this function: it is the only way to release (and thereafter reuse) memory allocated to a memory storage." to "You must be aware of an important feature of this function: other than cvReleaseMemStorage(), it is the only way to reuse the memory allocated to a memory storage."	Anonymous	Jul 18, 2011	Jul 22, 2011
Printed	Page 223 first line of fourth paragraph	Change "You can also allocate your own continuous blocks from a memory store" to "You can also allocate your own continuous blocks from a memory storage"	Anonymous	Jul 18, 2011	Jul 22, 2011

Printed	Page 225 Line 11	CV_SEQ_ELTYPE_POINT should be CV_SEQ_ELTYPE_PPOINT. **Note from the Author or Editor:** Submitter is correct, please make the indicated correction	Shiqi Yu	Dec 09, 2008	
Printed	Page 226 Line 21	"cvClearMemStore" should be "cvClearMemStorage".	deltat	Mar 01, 2010	Jul 22, 2011
Printed	Page 230 "... all of them operate in O(l) time ..."	"... all of them operate in O(_l_) time ..." should read "... all of them operate in O(_1_) time ..."	Anonymous	May 10, 2009	Jul 22, 2011
Printed	Page 230 third line of paragraph	Change "The Push functions return an argument to the element pushed into the sequence" to: "The Push functions return a pointer to the element pushed into the sequence"	Anonymous	Jul 18, 2011	Jul 22, 2011
Printed	Page 234 second line of text on page	After ..."then the entire sequence is copied." at the top of the page, add the following to the end of the paragraph: "The return value of cvCvtSeqToArray() is a void* pointer which is equal to the elements pointer provided when the function was called." *(void and elements should be in code font)	Anonymous	Jul 18, 2011	Jul 22, 2011
Printed	Page 235 first sentence of note	Change "Figure 8-1" to "Figure 8-2"	Anonymous	Jul 18, 2011	Jul 22, 2011
Printed	Page 240 & 261 Figures 8-4 & Figure 8-13	Figures 8-4 (pg 240) and 8-13 (page 261) have an error on the freeman chain code representation. The code that ends 5-6-6-6-6-7 should be 5-6-6-6-6-6-7; 5-sixes. This can be seen by two methods. In both figures the there are 5 left-horizontal arrows. Also in Fig 8-13 in the 45-degree view there are 5-UL arrows and the chain code ends 6-7-7-7-7-7-8; 5-sevens. Also in comparing figure 8-3 CV_RETR_LIST to the related text: The text says "retrieves all the contours". and "eight contours" are found". This happens to agree with the figure. However the trees for CV_RETR_EXTERNAL, CV_RETR_CCOMP and CV_RETR_TREE , which also say "retrieves all the contours", have 9 contours. Also the figure 8-2 shows 9 contours. The contour h000 is missing from the CV_RETR_LIST tree.	Anonymous	Jun 24, 2009	
Printed	Page 243 second paragraph, last sentence	Delete the last sentence of the paragraph: "Finally, that image is displayed and the structures we allocated at the beginning of the callback are released."	Anonymous	Jul 18, 2011	Jul 22, 2011
Printed	Page 243 second sentence of third paragraph	Change "This is a good example to play with yourself and see what effects result from changing either the contour finding mode (CV_RETR_LIST in the code) or the max_depth that is used to draw the contours (0 in the code)." to this: "This is a good example to tinker with on your own to explore the effects of changing either the contour finding mode (CV_RETR_LIST in the code) or the max_depth that is used to draw the contours (0 in the code)."	Anonymous	Jul 18, 2011	Jul 22, 2011
Printed	Page 247, 248 Paragraph beginning at bottom of page 247, continuing at top of p 248	Paragraph should read like this: "The first argument of cvArcLength() is the contour itself, whose form may be either a sequence of points (CvContour* or CvSeq*) or an n-by-1 two-channel matrix (CvMat*) of points. Next are the slice argument and is_closed, an argument indicating whether the contour should be treated as closed. The possible values of is_closed are: �true� (any value greater than zero), �false� (a value of zero), or a negative value. A negative value (which is the default) indicates that the function should check the special CV_SEQ_FLAG_CLOSED bit in the sequence header to determine if the sequence is closed or not. The slice argument allows us to select only some subset of the points in the curve." **Note from the Author or Editor:** true and false should be surrounded by quotes	Anonymous	Jul 18, 2011	Jul 22, 2011
Printed	Page 248 third sentence of second paragraph under Bounding boxes	Change "To understand the second argument, update, we must harken back to footnote 8." to	Anonymous	Jul 18, 2011	Jul 22, 2011

		"To understand the second argument, update, we must harken back to one of the earlier footnotes in this chapter."			
Printed	Page 251 The first line of the 3rd paragraph	"The second utility function, cvPointSeqFromMat()" should be "The third ...".	Shiqi Yu	Dec 10, 2008	Jul 22, 2011
Printed	Page 252, 253 various places on both pages	The cvContoursMoments function does not exist. It is properly named "cvContourMoments." (delete the s from Contours)	eric gradman	Jan 06, 2009	Jul 22, 2011
Printed	Page 258 first sentence under code block	Change "This code references CvTermCriteria()" to "This code references CvTermCriteria"	Anonymous	Jul 18, 2011	Jul 22, 2011
Printed	Page 259 1st paragraph	The first sentence reads "There are three important OpenCV methods that relate to complex hulls and convexity defects.". This should read, "There are three important OpenCV methods that relate to convex hulls and convexity defects.".	Idris Soule	Nov 06, 2010	Jul 22, 2011
Printed	Page 261 Figure 8-13	The code that ends 5-6-6-6-6-7 should be 5-6-6-6-6-6-7; 5-sixes. The code that ends 6-7-7-7-7-8 should be 6-7-7-7-7-7-8; 5-sevens.	Anonymous	Jul 18, 2011	
Printed	Page 263 exercise number 5	Change 126.7 to 125.7	Anonymous	Jul 18, 2011	Jul 22, 2011
Printed	Page 268, 269 Last paragraph of 268 (and first two lines at top of 269	Move last sentence of paragraph to the beginning of the paragraph. The paragraph should read: "The cvInitLineIterator() function returns the number of points that will be iterated over for that line. A companion macro, CV_NEXT_LINE_POINT(line_iterator), steps the iterator from one pixel to another. The input image may be of any type or number of channels. Points pt1 and pt2 are the ends of the line segment. The iterator line_iterator just steps through, pointing to the pixels along the line between the points. Regardless of the number of channels in the image, each call to CV_NEXT_LINE_POINT() moves the line_iterator to the next pixel. All the channels are available at once as line_iterator.ptr[0], line_iterator.ptr[1], and so forth. The connectivity can be 4 (the line can step right, left, up, or down) or 8 (the line can additionally step along the diagonals). Finally if left_to_right is set to 0 (false), then line_iterator scans from pt1 to pt2; otherwise, it will go from the leftmost to the rightmost point."	Anonymous	Jul 18, 2011	Jul 22, 2011

Printed	Page 269
	6th line from bottom of code block
		Change direction of slashes.
		
		fprintf(fptrb,"/n");fprintf(fptrg,"/n");fprintf(fptrr,"/n");
		
		change to
		
		fprintf(fptrb,"\n");fprintf(fptrg,"\n");fprintf(fptrr,"\n");
			Anonymous	Jul 18, 2011	Jul 22, 2011

Printed	Page 270 1st paragraph	formula Nchannels X max(|pt2x - pt2x| + 1,|pt2y -pt2y| + 1) should be Nchannels X max(|pt2x - pt1x| + 1,|pt2y -pt1y| + 1) **Note from the Author or Editor:** Page number of error: 270 Location on the page: 1st paragraph Version of product where error was found: Printed Detailed description of error: formula Nchannels X max(|pt2x - pt2x| + 1,|pt2y - pt2y| + 1) should be Nchannels X max(|pt2x - pt1x| + 1,|pt2y -pt1y| + 1)	Hugo Jacques	Jan 10, 2010	Jul 22, 2011
Printed	Page 278 first end note	Change "learning-oriented tubes" to "learning oriented cylanders" delete hyphen and change tubes to cylanders	Anonymous	Jul 18, 2011	Jul 22, 2011
Printed	Page 280 last sentence of second paragraph	Change last sentence "A second runtime threshold allows for adjusting the model to specific conditions." to "At runtime, the threshold for inclusion in a �box� can be set to a different value than was used in the construction of the boxes; often this threshold is simply set to zero in all three dimensions." **Note from the Author or Editor:**	Anonymous	Jul 18, 2011	Jul 22, 2011

		the word box should be in quotes			
Printed	Page 282 function "int update_codebook"	In the second for loop of the function, variable 'i' is declared in the for loop which means that when you get to the end of the function "return (i)" there is no variable in the scope. Declare "int i" immediately before the for loop. **Note from the Author or Editor:** The submittor is correct about the error, but submitted correction is in poor style. To fix the problem, the following changes should be made: 1) The line "int found_codeword = -1;" on p282 should be inserted before the line "for(int i=0; i<c.numEntries; i++) {" 2) the line "found_codeword = i;" should be inserted immediately before the line "break;" at the bottom of page 282. 3) The line "if(i == c.numEntries) //if no existing codeword found, make one" on p283 should be changed to read "if(found_codeword==-1) // If no existing codeword was found, make one." 4) The line "return(i)" on p284 should be changed to read: "return(found_codeword >= 0 ? found_codeword : c.numEntries);"	IanLee1521	Sep 13, 2010	

Printed	Page 286 background_diff(...)	In the for loop of the function, variable 'i' is declared in the for loop which means that when you get to the end of the function "if(i >= ...)" there is no variable in the scope.
		
		Declare "int i" immediately before the for loop.
		
		Note from the Author or Editor:
		The submittor is correct, this is a mistake. The correction proposed by the submittor would work, but it is poor coding style. The following changes should be made to make the code work correctly:
		
		1) The line which reads: "break; //Found an entry that matched all channels" should be changed to read "return(0); // Found an entry that matched all channels."
		
		2) The line which reads "If(i>= c.numEntries) return(255);" should be deleted
		
		3) The line which reads "return(0);" (immediately following the above mentioned line) should be changed to read "return 255; // Apparently no match could be found."
			IanLee1521	Sep 13, 2010	

Printed	Page 286 last two lines of code block	Switch (255) and (0) so the last two lines of code read:
		
		if(i >= c.numEntries) return(0);
		  return(255);
		}
			Anonymous	Jul 18, 2011	Jul 22, 2011

Printed	Page 290 Code after first paragraph	const CvScalar CVX_WHITE = CV_RGB(0xff,0xff,0xff) const CvScalar CVX_BLACK = CV_RGB(0x00,0x00,0x00) These lines should finish with ; **Note from the Author or Editor:** Submitter is correct, please make the indicated change.	Anonymous	Oct 28, 2008	
Printed	Page 300 third line of last paragraph	Change "faint lines going out to its vertex" to "dotted lines going out to its vertex."	Anonymous	Jul 18, 2011	Jul 22, 2011
Printed	Page 301 Figure 9-12	I believe that this diagram is slightly flawed. In (c) Two of the "edges" are still visualized (the ones headded to the fictitious point in the south), and the "circum-circle" mentioned in the preceeding text (the one that touches that fictitious point and the two points from which the above mentioned lines are emenating) is both not in the right place and shown as a dotted line instead of a dashed line as are all of the other circles. [If the dotted edges are headed for that far away point, the visualized circle's location and included points are not consistant with the location of the far away point.] [In conversation with Kouichi-san, Vadim suggested just getting rid of this construction in both the image and the (last sentence of the) preceeding text. I am inclined to agree.	Anonymous	Jul 18, 2011	
Printed	Page 301 text for number 1	Delete "and start at one of its vertices (this yields a definitive outer starting point)." so that number 1 reads: "1. Add the external triangle."	Anonymous	Jul 18, 2011	Jul 22, 2011
Printed	Page 304 second line of last	Change "The structure of cvQuadEdge2D contains a det of two..."	Anonymous	Jul 18, 2011	Jul 22, 2011

	paragraph	to "The structure CvQuadEdge2D contains a set of two..."			
Printed	Page 308 First sentence under Points from edges	Change: "We�ll also need to know how to retrieve the actual points from Delaunay or Voronoi vertices." to "We�ll also need to know how to retrieve the actual points from Delaunay or Voronoi edges."	Anonymous	Jul 18, 2011	Jul 22, 2011
Printed	Page 309, 310 last code block on 309, first code block on 310	Change the uppercase I to lower case i in the last line of both code blocks: They should read on 309: (CvSubdiv2DPoint*)cvGetSeqElem((CvSeq*)subdiv, i); } and on 310: CvQuadEdge2D*)cvGetSeqElem((CvSeq*)(my_subdiv->edges), i); }	Anonymous	Jul 18, 2011	Jul 22, 2011
Printed	Page 310 text of number 1 in middle of page	Change: 1.Until you have circumnavigated the convex hull, go to the next edge on the hull via cvSubdiv2DRotateEdge(CvSubdiv2DEdge edge, 0). to: 1.Until you have circumnavigated the convex hull, go to the next edge on the hull via cvSubdiv2DRotateEdge(CvSubdiv2DEdge edge, 2).	Anonymous	Jul 18, 2011	Jul 22, 2011
Printed	Page 314 2nd paragraph, Hint iin question 5	Hint is asking to look carefully at Figure 9-8. Shouldn't this be 9-18 ? **Note from the Author or Editor:** The submittor is correct, the reference should be to the figure on the same page, currently Figure 9-18.	Hugo Jacques	Mar 02, 2010	
Printed	Page 318 third and fourth lines on page	Change "(Here wi,j is a weighting term that can be uniform, but is often used to create a circular window or Gaussian weighting.)" to: (Here wi,j is a weighting term that can be uniform but is often used to create an effectively non-square window, by setting some entries to zero, or Gaussian or other weighting.) *i, j, are subscripts	Anonymous	Jul 18, 2011	Jul 22, 2011
Printed	Page 322 Figure 10-3	Correct "v_3" on right side of upper right figure to be v_4. Correct {v_3} in subcaption to the same figure to be {v_i}.	Anonymous	Jul 18, 2011	
Printed	Page 324 Note of Figure 10-4	[Black82] should be: [Black92]	Yishi Guo	Jan 29, 2010	Jul 22, 2011
Printed	Page 324 Figure 10-4	"Spacial" should be "Spatial" **Note from the Author or Editor:** Submitter is correct, change misspelling in figure. (Note, the error is in the figure itself, not in the figure caption.)	Matt Montag	Sep 16, 2011	
Printed	Page 344 third sentence in first paragraph	Change Here, the expected gradient magnitude will be just the average number of time-stamp ticks between each silhouette in successive calls to cvUpdateMotionHistory(); to: Here, the expected gradient magnitude will be just the average number of milliseconds in the time-stamp between each silhouette in successive calls to cvUpdateMotionHistory();	Anonymous	Jul 18, 2011	Jul 22, 2011
Printed	Page 348 Figure 10-17	These images are WAY too dark. This needs to be corrected.	Anonymous	Jul 18, 2011	
Printed	Page 352 2nd equation	There are 2 "^" missing, for x_1 and for the variance in the second fraction's numerator.	Dominik Schmidt	Oct 23, 2009	

		Note from the Author or Editor: This submission is correct. Actually three corrections need to be made: 1) the text "we have only our first measure $x\_1 = x\_1$ and its...", the text should be changed to read "we have only our first measurement $x^\_1 = x\_1$ and its..." (i.e. change 'measure' to 'measurement' and add a "hat" to the x_1 on the left side of the equal sign.) 2) In the equation immediately below the previous paragraph, change "x_1" to "$x^\_1$" (i.e. add a "hat" to the "x_1" on the right side of the equation), and change "sigma_1^2" to "sigma^_1^2" (i.e. add a "hat" to the sigma-two_squared in the numerator of the second fraction on the right hand side of the equation.			
Printed	Page 352 second major equation on page	The numerator on the right side should be sigma-1-hat-squared, not sigma-1-squared.	Anonymous	Jul 18, 2011	
Printed	Page 352 fifth paragraph, second sentence	Left hand side should be x-1-hat, not x-1	Anonymous	Jul 18, 2011	
Printed	Page 357 2nd equation	Matrix H is written as a 4-by-2 matrix, but it should be its transpose instead.	Nils Plath	Aug 19, 2010	
Printed	Page 358 1st equation	It should read ...z_k... instead of ...$z^\_k$..., i.e. the - (minus) superscript of z_k is to be omitted.	Dominik Schmidt	Oct 23, 2009	

Printed	Page 359
	6th line of code on top of page
		Change:
		
		CvMat* error_cov_pre; // prior error covariance:
		                    // (P_k'= F P_k-1 Ft) + Q
		
		to:
		
		CvMat* error_cov_pre; // prior error covariance:
		                    // P_k'=(F P_k-1 Ft) + Q
		
		(move the first parenthesis over)
			Anonymous	Jul 18, 2011	Jul 22, 2011

Printed	Page 365 Figure 10-20	The author says: This image sucks. Redraw with ◆real◆ Gaussians.	Anonymous	Jul 18, 2011	
Printed	Page 365 first line of last code block	Delete) from beginning of line. Line should read: typedef struct CvConDensation	Anonymous	Jul 18, 2011	Jul 22, 2011
Printed	Page 367 line 9 of code fragment	Should CD->flConfidence[i] = Prob; read Should CD->flConfidence[i] = p;	Anonymous	Oct 11, 2008	Jul 22, 2011
Printed	Page 372 description of Figure 11-2	Change "A point Q = (X, Y, Z) is projected onto the image plane by the ray passing through the center of projection, and the resulting point on the image is q = (z,y,f); the image is really just the projection screen "pushed" in front of the pinhole (the math is equivalent but simpler this way) to: A point Q = (X, Y, Z) is projected onto the image plane by the ray passing through the center of projection; the image plane is really just the projection screen ◆pushed◆ in front of the pinhole (the math is equivalent but simpler this way)	Anonymous	Jul 18, 2011	Jul 22, 2011
Printed	Page 374 third and fourth full paragraphs and note	Change subscript scr to src	Anonymous	Jul 18, 2011	Jul 22, 2011
Printed	Page 376	Tangential distortion equations should be $x_{corrected} = x + [2p\_1xy + p\_2(r^2+2x^2)]$ $y_{corrected} = y + [p\_1(r^2+2y^2) + 2p\_2xy]$	Anonymous	Oct 20, 2008	
Printed, PDF	Page 386 5th paragraph	The text is: "The homography matrix H that maps a planar object◆s points onto the imager is then described completely by H = sM[r1 r2 t], where: q = sHQ" Strictly interpreted, though, the s term is squared that way. It might be worthwhile to reiterate that s is being factored out of H as per convention.	togaen	Jul 22, 2010	

		Note from the Author or Editor: The submittor is correct that this is not as clear as it could be. I propose the following changes to add clarity. 1) on p385, the equation "q~ = s H Q~" should be changed by the addition of a subscript '1' on 's' (i.e. 's' becomes 's_1', where '_' denotes subscripting). 2) The text "Here we have introduced the parameter s" should be changed such that 's' is again subscripted 's_1'. 3) on p386 the equation beginning "q~ = s M W Q~, where M = ..." should be changed such that 's' is subscripted 's_1'., and the same change should be made to 's' as it appears (both times) in the matrix equation "[[x][y][z]] = s M[r_1 r_2 r_3 t][[X][Y][0][1]] = s..." 4) the text "...described completely by H = s M[r_1 r_2 t],..." should be changed such that the 's' is subscripted by '2' (i.e. 's' becomes 's_2'). 5) in the same sentence described in 4), immediately after the comma in ", where:" (i.e. before the word 'where') the following insertion should be made: "for some other arbitrary constant s_2, ". 6) The equation on the following line should be changed such that 's' is replaced by 's_1'. (i.e. 's' subscripted by '1') 7) In the next line after the equation following the sentence in 4) and 5), after the sentence "Observe that H is now a 3-by-3 matrix. please add a footnote. The footnote should read "The constants s_1 and s_2 are not necessarily equal, but what matters to us here is that they are both equally arbitrary numbers."			
Printed	Page 390 third equation on page	The final B column vector in this equation does not need the 'T' (transpose).	Anonymous	Jul 18, 2011	
Printed	Page 391 Last equation on page.	Typing error, the equation should look like this: $x\_p = f\_x * X\_w / Z\_w + c\_x$ $y\_p = f\_y * Y\_w / Z\_w + c\_y$	Anonymous	Oct 28, 2008	
Printed	Page 391 last equation	In the formula, it has $y_{p} = f_{y} * X^{W}/Z^{W} + c_{y}$. It should have been $y_{p} = f_{y} * Y^{W}/Z^{W} + c_{y}$ **Note from the Author or Editor:** Submitter is correct, please make the suggested change. (Note his use of latex formatting, the point is to change the 'X' to a 'Y')	Ramesh Marikhu	Feb 16, 2009	
Printed	Page 403 Lines 3 and 4	"cvFindExtrinsicCameraParameters2" should be "cvFindExtrinsicCameraParams2" "the jacobian function" should be changed to "cvRodrigues2() function"	Shiqi Yu	Dec 24, 2009	Jul 22, 2011
Printed	Page 409 first paragraph	First part of paragraph should read: To get a bird�s-eye view , we�ll need our camera intrinsic and distortion matrices from the calibration routine. Just for the sake of variety, we�ll read the files from disk. We put a chessboard on the floor and use that to obtain a ground plane image for a miniature robot car; (remove s from intrisics, change robot cart to miniature robot car)	Anonymous	Jul 18, 2011	Jul 22, 2011
Printed	Page 412 first paragraph	Change "and drive the cart around" to "and drive the miniature car around"	Anonymous	Jul 18, 2011	Jul 22, 2011
Printed	Page 418 Figure 12-6	There is an error in this figure. The right hand plane should have coordinates x_r, y_r (not x_l, y_l) as printed.	Anonymous	Jul 18, 2011	
Printed	Page 419 last line on page	Change (from the points of projection to the corresponding epipolar points) to: (from the points of projection to the corresponding epipoles)	Anonymous	Jul 18, 2011	Jul 22, 2011
Printed	Page 420 last line of first paragraph, first bullet point	In last line of first paragraph: change "epipolar point" to "epipole" First bullet point should read: �Every 3D point in view of the cameras is contained in an epipolar plane that intersects each image. The resulting line of intersection is an epipolar line.	Anonymous	Jul 18, 2011	Jul 22, 2011
Printed	Page 421 third end note	Change "E was described in almost the exact same words"	Anonymous	Jul 18, 2011	Jul 22, 2011

					2011
		to "E was described in almost the exact same way"			
Printed	Page 422 First footnote	...with p_l and p_r, which are the location of the point P in the coordinate frames of the two cameras. -> ...with P_l and P_r, which are the location of the point P in the coordinate frames of the two cameras. (l, r are subscripts)	Anonymous	Oct 26, 2008	Jul 22, 2011
Printed	Page 425 footnote	In the second and third lines, the description of the RANSAC algorithm is really LMedS and vice versa. Should read: "but the basic idea of LMedS is to solve the problem many times using a random subset of the points and then take the particular solution closest to the average or the median solution. RANSAC takes a subset of points..."	Kyle H	Mar 26, 2009	Jul 22, 2011
Printed	Page 427 Paragraph before "Stereo Calibration"	The equation $ax + by = c = 0$ should be replaced by $ax + by + c = 0$.	Anonymous	Oct 21, 2009	Jul 22, 2011
Printed	Page 440 Second Paragraph	In the second paragraph that begins with "Correspondence is computed..." there is mention of the parameter subPixelDisparities near the end of the paragraph however this parameter can not be found in the OpenCV source. Thus there are only 16 subdisparities per pixel and it is currently not configurable. **Note from the Author or Editor:** Delete last five lines of paragraph, from "Disparities have discrete, subpixel rsolution..." to "Remember that large disparities represent closer distances." Add the following lines to the end of the paragraph: "Disparities have a discrete subpixel resolution which is equal to four bits of resolution below the individual pixel level. When the output image is a 32-bit floating point image, non-integer disparities will be returned. When the output image is a 16-bit integer, the disparity will be returned in 4-bit fixed-point form (i.e. multiplied by 16 and rounded to an integer)."	Anonymous	Jul 08, 2009	Jul 22, 2011
Printed	Page 445 First two lines of last paragraph	Change "Finally, if we rectified the images then we initialize the block-matching state (internal allocations and parameters) using cvCreateBMState(). We can then compute the disparity maps by using cvFindStereoCorrespondenceBM()." to: "Finally, if we have rectified the images, we can then compute the disparity maps by using cvFindStereoCorrespondenceBM(). (The block-matching state CvStereoBMState, which is passed to cvFindStereoCorrespondenceBM(), should be created in advance using cvCreateStereoBMState().)"	Anonymous	Jul 18, 2011	Jul 22, 2011
Printed	Page 446 line 14, 15 of code	Change "(0 for Hartley // or 1 for Bouguet stereo methods)." to: (0 for Bouguet // or 1 or 2 for Hartley stereo methods).	Anonymous	Jul 18, 2011	Jul 22, 2011

Printed	Page 448
	2/3 down in code
		I believe the following line is wrong:
		
		cvPoint3D32f(i*squareSize, j*squareSize, 0);
		
		shouldn't the x coordinate (j) be first?
		
		cvPoint3D32f(j*squareSize, i*squareSize, 0);
			Joe Stam	Jan 05, 2009	Jul 22, 2011

Printed	Page 461 first sentence of last paragraph	Change "Many algorithms have been devised to perform learning and clustering." to: "Many algorithms have been devised to perform classification and clustering."	Anonymous	Jul 18, 2011	Jul 22, 2011
Printed	Page 462 Second sentence under OpenCV ML Algorithms	Change: "...which are in CVCORE, and face detection, which is in CV." to:	Anonymous	Jul 18, 2011	Jul 22, 2011

	Algorithms	"...which are in CXCORE, and face detection, which is in CV."			
Printed	Page 464 2nd paragraph	The URL for Flickr is wrong, "http://www.flicker.com" should be "http://www.flickr.com". Flickr is without "e".	Hristo Hristov	Apr 16, 2009	Jul 22, 2011
Printed	Page 471 The last footnote. The last line of page 471	"cvcore" should be "cxcore".	Shiqi Yu	Dec 19, 2008	Jul 22, 2011
Printed	Page 471 Line 4 of the 3rd paragraph	OpenCV Wiki documentation has been changed from http://opencvlibrary.sourceforge.net to http://opencv.willowgarage.com/. The wiki URLs in the book should be all updated. **Note from the Author or Editor:** change (http://opencvlibrary.sourceforge.net/) to (http://opencvlibrary.willowgarage.com/).	Shiqi Yu	Dec 19, 2008	Jul 22, 2011
Printed	Page 472 The last two rows in Table 13-3	"cvcore" should be "cxcore" in the last two rows (on the right) in Table 13-3.	Shiqi Yu	Dec 19, 2008	Jul 22, 2011
Printed	Page 475 1st paragraph	A code snippet for predict method has: float CvStatMode::predict(const CvMat* sample [,<prediction_params>])const; There is no class CvStatMode replace with CvStatModel. **Note from the Author or Editor:** This submission is correct, "CvStatMode" should be changed to "CvStatModel" in the declaration at the top of the page, and anywhere else it should appear.	Idris Soule	Jan 08, 2011	
Printed	Page 477 text under CV_COVAR_NORMA	Text should read: CV_COVAR_NORMAL Do the regular type of covariance calculation as in the previously displayed equation. If the flag is not set, the following matrix is computed instead: $\Sigma~=E[(X-\mu_x)^T(X-\mu_x)]$ When each vector size is significantly larger than the number of vectors, $\Sigma~$ will be much smaller than Σ (and thus much faster to process). On the other hand, it is easy to prove that the non-zero eigenvalues of Σ and $\Sigma~$ are the same. It also follows that for any eigenvector v of Σ, corresponding to some eigenvalue λ, can be easily computed from its counterpart $v~$ of $\Sigma~$ with the same eigenvalue by the relation: $v=(X-\mu_x)(v)~$.	Anonymous	Jul 18, 2011	
Printed	Page 499 first line on page	Change "...that may be missing then we can set use_surrogates to CvDTreeParams::use_surrogates..." to: "...that may be missing then we can set use_surrogates to true..." (true is in code font)	Anonymous	Jul 18, 2011	Jul 22, 2011
PDF	Page 511 line 11 of Example 13-4	"Double" should be "double"	Anonymous	Sep 26, 2009	Jul 22, 2011
Printed	Page 512 Example 13-4	Code in Example 13-4. cvRectangle(img,cvPoint(r.x,r.y),cvPoint(r.x+r.width,r.y+r.height),colors[i%8]) should be corrected as cvRectangle(small_img,cvPoint(r->x, r->y), cvPoint(r->x+r->width,r->y+r->height), colors[i%8]); **Note from the Author or Editor:** Submitter is correct, please make the change indicated.	Anonymous	Jul 07, 2009	
PDF	Page 512 line 12 / 13	In addition to the already mentioned mistake on this page ("." should be "->"), the scale factor is not taken into account. The correct lines are: cvPoint(r->x * scale, r->y * scale), cvPoint((r->x + r->width) * scale, (r->y + r->height) * scale)	Anonymous	Sep 26, 2009	Jul 22, 2011
PDF	Page 512 line 18	cvReleaseImage(&graygray); should be cvReleaseImage(&gray); **Note from the Author or Editor:** Submitter is correct, please change as indicated.	Anonymous	Sep 26, 2009	

| Printed | Page 548 Left column | An index entry for the cvSmooth() function is missing. There should probably be a reference to pages 109-110 for this function.

Note from the Author or Editor:
Submitter is correct, please add index entry on p548 for cvSmooth and reference page 109. | Michael D. Dudley | May 30, 2009 | |

Sign up today to receive special discounts, product alerts, and news from O'Reilly.

Enter Email   Submit

Privacy Policy >
View Sample Newsletter >

View All RSS Feeds >

© 2015, O'Reilly Media, Inc.
(707) 827-7019   (800) 889-8969

All trademarks and registered trademarks appearing on oreilly.com are the property of their respective owners.

About O'Reilly
Academic Solutions
Jobs
Contacts
Corporate Information
Press Room
Privacy Policy
Terms of Service
Work with Us
Editorial Independence

Community
Animals
Authors
Webcasts
Community & Featured Users
Forums
Newsletters
O'Reilly Answers
RSS Feeds
Meetups & User Groups
O'Reilly Atlas (beta)

Partner Sites
makezine.com
makerfaire.com
craftzine.com
igniteshow.com
PayPal Developer Zone
O'Reilly Insights on Forbes.com

Shop O'Reilly
Customer Service
Contact Us
Shipping Information
Ordering & Payment
Affiliate Program
The O'Reilly Guarantee