

## ERRATA

*Computer Graphics Through OpenGL: From Theory to Experiments, Second Edition* by Sumanta Guha

If you spot additional errors, please report to [sg@sumantaguha.com](mailto:sg@sumantaguha.com).

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*BIG BUGS: Indexes:* I screwed up badly when using the Latex procedure to generate indexes. Many items in both the subject and program indexes have wrong page numbers. E.g., the subject index indicates “provoking vertex” to be on page 479, but it’s not; it’s actually on page 453. Thanks to reader Alex for pointing out the problem and my sincerest apologies to all those who have been inconvenienced by the inaccurate entries.

I have regenerated (April, 20, 2015) the indexes and the new ones are linked from the home page of the book’s website (URL: <http://sumantaguha.com/files/materials/subjectAndProgramIndex.pdf>).

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*Flawed hard copies of the second edition:* There was a problem with the first print run of the second edition which resulted in several figures being misrendered. Fortunately, this was detected early and major distributors alerted and flawed copies recalled and pulped. However, a few were sold for which the publisher announced an offer of replacement with a corrected copy. We believe at this time almost every buyer of a flawed copy has already requested and received a replacement. However, there might be still be a few in circulation. Here’s what you need to know.

*How do I tell if I have a flawed copy?* Turn to page 59 and look hard at Figure 2.39(b). Do you see any dashed lines? If you see no dashed lines at all then you have a flawed copy. If you do see dashed lines then you are fine. (In fact, all the figures from the corrected version are available for download at <http://sumantaguha.com/resources>, so you could compare them with what you have.)

*If I have a flawed copy do I really need a replacement or are the defects minor?* All dashed and dotted lines in figures were wrongly rendered solid in the flawed copies. This will indeed make it hard to follow the text when a reference is made to a dashed or dotted line. Of course, the correct figures are all available to download at <http://sumantaguha.com/resources>, so you could refer to them while perusing the text, but this is unlikely to make for a pleasant reading experience.

*What do I do if I have a flawed copy?* Request a replacement from the editor Randi Cohen ([randi.cohen@taylorandfrancis.com](mailto:randi.cohen@taylorandfrancis.com)).

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**Updated** September 1, 2014

1. p. 70: Figure 3.1(b) should be wireframe.
2. p. 93: Example 3.1: the array on the righthand side of both equations should be in curly brackets (thanks Denis Dalpé).

3. p. 295: Caption of Figure 7.6 should read ... at the vertices  $P_1$ ,  $P_2$  and  $P_3$  ....
4. p. 364: Caption of Figure 10.23 should read ... around vertices  $U$  and  $W$  ... (thanks Denis Dalpé).
5. p. 403: Experiment 10.17: the program name in the second line should be `bezier-CurveWithEvalCoord.cpp` (thanks Denis Dalpé).
6. p. 432: 9th line from bottom should read “other words, ...” (thanks Denis Dalpé).
7. p. 442: Caption of Figure 11.20 has space missing in ... (c)Ambient ....
8. p. 539: Caption of Figure 13.22 should read ... (c) Stencil buffer configuration after R is drawn. ....
9. p. 620: Figure 16.17: the label of the rightmost dotted arc should be  $N_{1,2}^1$ .
10. p. 690: Caption of Figure 18.11 should read ...  $p'_0$ ,  $p'_1$  and  $p'_2$  ... in place of ...  $p'_0$ ,  $p'_1$  and  $p'_3$  ... in both places.

**Updated** February 1, 2015

1. Experiment Source (<http://sumantaguha.com/downloads>): Chapter 2: `circularAnnuluses.cpp`: In `main()` the fifth statement should be

```
glutInitDisplayMode(GLUT_SINGLE | GLUT_RGBA | GLUT_DEPTH);
```

*Experimenter Source has been updated to fix this.*

**Updated** February 16, 2015

1. p. 152: Experiment 4.29: the 4th line should read ...  $los = (0.0, 0.0, 0.0) - (0.0, 0.0, 15.0) = (0.0, 0.0, -15.0)$  ... (thanks Siraj Muhammad).

**Updated** March 2, 2015

1. Experiment Source (<http://sumantaguha.com/downloads>): Chapter 9: `sphereInBox1.cpp` and Chapter 11: `sphereInBox1.cpp` and Chapter 11: `sphereInBox2.cpp`: In globals at the top the following should be

```
static unsigned char stripIndices0[] = {5, 6, 4, 7, 0, 3, 1, 2};
```

*Experimenter Source has been updated to fix this.*

**Updated** March 22, 2015

1. Experiment Source (<http://sumantaguha.com/downloads>): Chapter 1: All three demo programs were written by students using GLUT before FreeGLUT became the standard. This may cause problems running the executables in a FreeGLUT environment. The programs have now been modified in MSVS 2010 to use FreeGLUT and the template typical of programs from Chapter 2 on.

*Experimenter Source has been updated to include the recompiled Windows executables. The Mac executables are unchanged.*

(Thanks Paul Lane for pointing out the issue.)

**Updated** October 7, 2015

1. Experimenter Source (<http://sumantaguha.com/downloads>): Chapter 6: spaceTravelFrustumCulled.cpp: In drawScene() the call to asteroidsQuadtree.drawAsteroids() for the right viewport has the wrong parameters.

*Experimenter Source has been updated to fix this.*

(Thanks Adrian Robson for pointing out the bug.)