

Where to Find More Information about Computer Graphics and Related Topics CS 450/550

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1. References

1.1 General Computer Graphics

SIGGRAPH Online Bibliography Database:

<http://www.siggraph.org/learn/computer-graphics-bibliography-database>

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Francis Hill and Stephen Kelley, *Computer Graphics Using OpenGL*, 3rd Edition, Prentice Hall, 2006.

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Paul Heckbert, *Graphics Gems 4*, Academic Press, 1994.

Alan Paeth, *Graphics Gems 5*, Academic Press, 1995.

1.2 Math and Geometry

Ron Goldman, *An Integrated Introduction to Computer Graphics and Geometric Modeling*, CRC Press, 2009.

Michael Mortenseon, *Geometric Transformations for 3D Modeling*, 2nd Edition, Industrial press, 2007.

Michael Mortenson, *Geometric Modeling*, John Wiley & Sons, 2006.

Eric Lengyel, *Mathematics for 3D Game Programming and Computer Graphics*, Charles River Media, 2002.

Jean Gallier, *Curves and Surfaces in Geometric Modeling*, Morgan Kaufmann, 2000.

Walter Taylor, *The Geometry of Computer Graphics*, Wadsworth & Brooks/Cole, 1992.

Gerald Farin, *Curves and Surfaces for Computer Aided Geometric Design*, 3rd Edition, Academic Press, 2001.

Gerald Farin and Dianne Hansford, *The Geometry Toolbox for Graphics and Modeling*, AK Peters, 1998.

1.3 Shaders

Mike Bailey and Steve Cunningham, *Computer Graphics Shaders: Theory and Practice*, Second Edition, CRC Press, 2012.

Dave Shreiner, Graham Sellers, John Kessenich, and Bill Licea-Kane, *OpenGL Programming Guide, 8th Edition*, 2013.

Steve Upstill, *The RenderMan Companion*, Addison-Wesley, 1990.

Tony Apodaca and Larry Gritz, *Advanced RenderMan: Creating CGI for Motion Pictures*, Morgan Kaufmann, 1999.

Saty Raghavachary, *Rendering for Beginners: Image Synthesis using RenderMan*, Focal Press, 2005.

Randima Fernando, *GPU Gems*, NVIDIA, 2004.

Matt Pharr, Randima Fernando, *GPU Gems 2*, NVIDIA, 2005.

Hubert Nguyen, *GPU Gems 3*, NVIDIA, 2007.

<http://www.clockworkcoders.com/ogls1>

1.4 Gaming

<http://gamedeveloper.texterity.com/gamedeveloper/fall2011cg#pg1>

Jesse Schell, *The Art of Game Design*, Morgan-Kaufmann, 2008.

Alan Watt and Fabio Polcarpo, *Advanced Game Development with Programmable Graphics Hardware*, AK Peters, 2005.

Jacob Habgood and Mark Overmars, *The Game Maker's Apprentice*, Apress, 2006.

David Eberly, *3D Game Engine Design: A Practical Approach to Real-Time Computer Graphics*, Morgan Kaufmann, 2006.

<http://www.gamedev.net>

<http://www.gamasutra.net>

<http://www.yoyogames.com>

1.5 Rendering

Andrew Glassner, *Principles of Digital Image Synthesis*, Morgan Kaufmann, 1995.

Michael Cohen and John Wallace, *Radiosity and Realistic Image Synthesis*, Morgan-Kaufmann, 1993.

Andrew Glassner, *An Introduction to Ray Tracing*, Academic Press, 1989.

1.6 Animation

Alan Watt and Mark Watt, *Advanced Animation and Rendering Techniques*, Addison-Wesley, 1998.

Nadia Magnenat Thalmann and Daniel Thalmann, *Interactive Computer Animation*, Prentice-Hall, 1996.

1.7 Stereographics

David McAllister, *Stereo Computer Graphics and Other True 3D Technologies*, Princeton University Press, 1993.

Lenny Lipton, *The CrystalEyes Handbook*, StereoGraphics Corporation, 1991.

Shab Levy, *Stereoscopic Imaging: A Practical Guide*, Gravitrax Creations, 2008.

1.8 Graphics Miscellaneous

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Aaftab Munshi, Dan Ginsburg, and Dave Shreiner, *OpenGL ES 2.0*, Addison-Wesley, 2008.

Tom McReynolds and David Blythe, *Advanced Graphics Programming Using OpenGL*, Morgan Kaufmann, 2005.

2. Periodicals

Computer Graphics and Applications: published by IEEE
(<http://www.computer.org>, 714-821-8380)

Computer Graphics World: published by Pennwell
(<http://www.cgw.com>, 603-891-0123)

Journal of Graphics, GPU, and Game Tools: published by Taylor Francis
(<http://www.akpeters.com>, 617-235-2210)

Journal of Computer Graphics Techniques
(<http://jcgt.org>)

Computer Graphics Quarterly: published by ACM SIGGRAPH
(<http://www.siggraph.org>, 212-869-7440)

Computer Graphics Forum., published by Eurographics
(<http://www.eg.org/EG/Publications/CGF>)

Computers & Graphics, published by Elsevier
(<http://www.elsevier.com/locate/cag>)

Transactions on Visualization and Computer Graphics: published by IEEE

(<http://www.computer.org>, 714-821-8380)

Transactions on Graphics: published by ACM
(<http://www.acm.org>, 212-869-7440)

Cinefex
(<http://www.cinefex.com>, 951-781-1917)

3. Professional organizations

ACMAssociation for Computing Machinery
<http://www.acm.org>
212-869-7440

SIGGRAPHACM Special Interest Group on Computer Graphics
<http://www.siggraph.org>
212-869-7440

SIGCHIACM Special Interest Group on Computer-Human Interfaces
<http://www.acm.org/sigchi>
212-869-7440

SIGHPCACM Special Interest Group on High-Performance Computing
<http://sighpc.org>
212-869-7440

EuroGraphics ...European Association for Computer Graphics
<http://www.eg.org>
Fax: +41-22-757-0318

IEEE.....Institute of Electrical and Electronic Engineers
<http://www.computer.org>
202-371-0101

IGDAInternational Game Developers Association
<http://www.igda.org>
856-423-2990

NABNational Association of Broadcasters
<http://www.nab.org>
800-521-8624

4. Upcoming Conferences

ACM SIGGRAPH:
2017: Los Angeles, CA – July 30 – August 3
<http://s2017.siggraph.org>
2018: Vancouver, BC – August 12-16
2019: Los Angeles, CA
2021: Los Angeles, CA

ACM SIGGRAPH Asia:

2016: Macao – December 5-8
<http://sa2016.siggraph.org/en/>

Interactive 3D Graphics and Games (i3D):

2017: Monterey, CA – March 4-5

ACM SIGCHI:

2017: Denver, CO – May 6-11
<http://www.sigchi.org>

IEEE Visualization:

2017: Santa Fe, NM
<http://ieeevis.org>

Eurographics

2017: Lyon, France -- April 24-29
2018: Saarbrücken, Germany -- April 23-27
<http://www.eg.org>

Game Developers Conference:

2017: San Francisco, CA – February 27 – March 3
<http://www.gdconf.com>

E3Expo

2017: Los Angeles, CA – June ??-??
<http://www.e3expo.com>

PAX (Penny Arcade Expo)

2016: Seattle, WA – August 26-27
<http://www.paxsite.com>

National Association of Broadcasters (NAB):

2017: Las Vegas, NV – April 22-27
<http://www.nab.org>