

## Referências Bibliográficas

- [1] AIREY, J.; ROHLF, J. ; BROOKS JR, F.. **Towards image realism with interactive update rates in complex virtual building environments.** In: PROCEEDINGS OF THE 1990 SYMPOSIUM ON INTERACTIVE 3D GRAPHICS, p. 41–50. ACM New York, NY, USA, 1990. 2.3
- [2] APPEL, A.. **Some techniques for shading machine renderings of solids.** In: PROCEEDINGS OF THE APRIL 30–MAY 2, 1968, SPRING JOINT COMPUTER CONFERENCE, p. 37–45. ACM New York, NY, USA, 1968. 2.1.1
- [3] ASSARSSON, U.; MOLLER, T.. **Optimized view frustum culling algorithms for bounding boxes.** JOURNAL OF GRAPHICS TOOLS, 5(1):9–22, 2000. 1.3, 3.2.4, 3.2.4, 4.5
- [4] ASSARSSON, U.; STENSTRÖM, P.. **A case study of load distribution in parallel view frustum culling and collision detection.** In: EURO-PAR '01: PROCEEDINGS OF THE 7TH INTERNATIONAL EURO-PAR CONFERENCE MANCHESTER ON PARALLEL PROCESSING, p. 663–673, London, UK, 2001. Springer-Verlag. 1.3, 3.2.7, 4.7
- [5] BAKER, D.; HEARN, M. P.. **Computer Graphics C Version.** Prentice Hall Press, New York, 1997. 2.3
- [6] BARTZ, D.; MEISSNER, M. ; HUTTNER, T.. **Extending graphics hardware for occlusion queries in opengl.** In: HWWS '98: PROCEEDINGS OF THE ACM SIGGRAPH/EUROGRAPHICS WORKSHOP ON GRAPHICS HARDWARE, p. 97–ff., New York, NY, USA, 1998. ACM. 2.3
- [7] BERNARDINI, F.; KLOSOWSKI, J. ; EL-SANA, J.. **Directional Discretized Occluders for Accelerated Occlusion Culling.** In: COMPUTER GRAPHICS FORUM, volume 19, p. 507–516. Blackwell Publishers Ltd, 2000. 2.3
- [8] BITTNER, J.; HAVRAN, V. ; SLAVIK, P.. **Hierarchical visibility culling with occlusion trees.** In: COMPUTER GRAPHICS INTERNATIONAL, 1998. PROCEEDINGS, p. 207–219, 1998. 2.3

- [9] BLINN, J.. **A trip down the graphics pipeline: the homogeneous perspective transform**. Computer Graphics and Applications, IEEE, 13(3):75–80, 1993. 2.1.2
- [10] BRUDERLIN, B.; HEYER, M. ; PFUTZNER, S.. **Interviews3d: A platform for interactive handling of massive data sets**. IEEE COMPUTER GRAPHICS AND APPLICATIONS, p. 48–59, 2007. 3.3
- [11] BUSS, S. R.. **3D Computer Graphics: A Mathematical Introduction with OpenGL**. Cambridge University Press, New York, 2003. 3
- [12] CATMULL, E. E.. **A Subdivision Algorithm for Computer Display of Curved Surfaces**. PhD thesis, Dept. of CS, U. of Utah, December 1974. 2.1.1
- [13] CLARK, J. H.. **Hierarchical geometric models for visible-surface algorithms**. In: SIGGRAPH '76: PROCEEDINGS OF THE 3RD ANNUAL CONFERENCE ON COMPUTER GRAPHICS AND INTERACTIVE TECHNIQUES, p. 267–267, New York, NY, USA, 1976. ACM. 3.2.3
- [14] COHEN-OR, D.; CHRYSANTHOU, Y.; SILVA, C. ; DURAND, F.. **A survey of visibility for walkthrough applications**. IEEE TRANSACTIONS ON VISUALIZATION AND COMPUTER GRAPHICS, p. 412–431, 2003. 2, 2.1.2, 2.2
- [15] COORG, S.; TELLER, S.. **Temporally coherent conservative visibility**. Technical report, Massachusetts Institute of Technology, Cambridge, MA, USA, 1995. 2.1.2, 2.3
- [16] COZZI, P. J.. **Visibility driven out-of-core hlood rendering**. Master's thesis, University of Pennsylvania, 2008. 4.1
- [17] DA SILVA, M. H.. **Tratamento eficiente de visibilidade através de Árvores de volumes envolventes**. Master's thesis, Pontifícia Universidade Católica do Rio de Janeiro (Departamento de Informática), Brazil, February 2002. 3.2.1
- [18] DAMKJÆR, J.. **Stackless bvh collision detection for physical simulation**, 2007. <http://image.diku.dk/projects/media/jesper.damkjaer.07.pdf>, visitado em 12/01/09. 3.2.5
- [19] DE TOLEDO, R.; LÉVY, B.. **Visualization of industrial structures with implicit gpu primitives**. In: PROCEEDINGS OF THE 4TH INTERNATIONAL SYMPOSIUM ON ADVANCES IN VISUAL COMPUTING, p. 139–150, 2008. 5.2

- [20] DIETRICH, A.; WALD, I. ; SLUSALLEK, P.. **Large-Scale CAD Model Visualization on a Scalable Shared-Memory Architecture**. In: Proceedings of 10th International Fall Workshop - Vision, Modeling, and Visualization (VMV), p. 303–310, 2005. 1.1
- [21] DUNN, F.; PARBERRY, I.. **3D Math primer for Graphics and Game Development**. Wordware Publishing Inc, 2002. 3.2.4
- [22] DURAND, F.; DRETTAKIS, G.; THOLLOT, J. ; PUECH, C.. **Conservative visibility preprocessing using extended projections**. In: PROCEEDINGS OF THE 27TH ANNUAL CONFERENCE ON COMPUTER GRAPHICS AND INTERACTIVE TECHNIQUES, p. 239–248. ACM Press/Addison-Wesley Publishing Co. New York, NY, USA, 2000. 2.3
- [23] ERICSON, C.. **Real-Time Collision Detection (The Morgan Kaufmann Series in Interactive 3-D Technology)**. Morgan Kaufmann, San Francisco, 2004. (document), 3.3
- [24] FLYNN, M.. **Computer Architecture: Pipelined and Parallel Processor Design**. Jones and Bartlett Publishers, Inc., USA, 1995. 3.2.6
- [25] FUCHS, H.; KEDEM, Z. ; NAYLOR, B.. **On visible surface generation by a priori tree structures**. In: PROCEEDINGS OF THE 7TH ANNUAL CONFERENCE ON COMPUTER GRAPHICS AND INTERACTIVE TECHNIQUES, p. 124–133. ACM Press New York, NY, USA, 1980. 2.1.1
- [26] GLsl. <http://www.clockworkcoders.com/ogsl/downloads.html>, visitado em 23/01/09. 3.4
- [27] GREENE, N.. **Detecting intersection of a rectangular solid and a convex polyhedron**. Academic Press Graphics Gems Series, p. 74–82, 1994. 3.2.4, 4.2
- [28] GREENE, N.; KASS, M. ; MILLER, G.. **Hierarchical Z-buffer visibility**. In: PROCEEDINGS OF THE 20TH ANNUAL CONFERENCE ON COMPUTER GRAPHICS AND INTERACTIVE TECHNIQUES, p. 231–238. ACM New York, NY, USA, 1993. 2.3
- [29] GRIBB, G.; HARTMANN, K.. **Fast extraction of viewing frustum planes from the world-view-projection matrix**, 2001. [http://www2.ravensoft.com/users/ggribb/plane extraction.pdf](http://www2.ravensoft.com/users/ggribb/plane%20extraction.pdf), visitado em 22/01/09. 3.1

- [30] HAINES, E.; WALLACE, J.. **Shaft culling for efficient ray-traced radiosity**. In: EUROGRAPHICS WORKSHOP ON RENDERING, May 1991. 3.2.4, 4.2
- [31] HAUMONT, D.; DEBEIR, O. ; SILLION, F.. **Volumetric cell-and-portal generation**. In: COMPUTER GRAPHICS FORUM, volume 3-22 de **EUROGRAPHICS Conference Proceedings**. Blackwell Publishers, 2003. 2.3
- [32] HUDSON, T.; MANOCHA, D.; COHEN, J.; LIN, M.; HOFF, K. ; ZHANG, H.. **Accelerated occlusion culling using shadow frusta**. In: SCG '97: PROCEEDINGS OF THE THIRTEENTH ANNUAL SYMPOSIUM ON COMPUTATIONAL GEOMETRY, p. 1–10, New York, NY, USA, 1997. ACM. 2.1.2, 2.3
- [33] JAMES, D.; ANDRIES, V.; STEVEN, K. ; JOHN, F.. **Computer graphics: principles and practice**. Addison-Wesley, New York, 1990. 2.1.2
- [34] KLOSOWSKI, J.; SILVA, C.; CENTER, I. ; HEIGHTS, Y.. **The prioritized-layered projection algorithm for visible setestimation**. IEEE transactions on visualization and computer graphics, 6(2):108–123, 2000. 2.3
- [35] KLOSOWSKI, J.; SILVA, C.; CENTER, I. ; HEIGHTS, Y.. **Efficient conservative visibility culling using theprioritized-layered projection algorithm**. IEEE Transactions on Visualization and Computer Graphics, 7(4):365–379, 2001. 2.3
- [36] KOLTUN, V.; CHRYSANTHOU, Y. ; COHEN-OR, D.. **Virtual occluders: An efficient intermediate pvs representation**. In: RENDERING TECHNIQUES 2000: 11TH EUROGRAPHICS WORKSHOP ON RENDERING, p. 59–70, 2000. 2.3
- [37] KOLTUN, V.; CHRYSANTHOU, Y. ; COHEN-OR, D.. **Hardware-accelerated from-region visibility using a dual ray space**. In: RENDERING TECHNIQUES 2001: PROCEEDINGS OF THE EUROGRAPHICS WORKSHOP IN LONDON, UNITED KINGDOM, JUNE 25-27, 2001, p. 205. Springer Verlag Wien, 2001. 2.3
- [38] LAINE, S.. **A general algorithm for output-sensitive visibility preprocessing**. In: I3D '05: PROCEEDINGS OF THE 2005 SYMPOSIUM ON INTERACTIVE 3D GRAPHICS AND GAMES, p. 31–40, New York, NY, USA, 2005. ACM. 2.3

- [39] LEYVAND, T.; SORKINE, O. ; COHEN-OR, D.. **Ray space factorization for from-region visibility**. ACM Transactions on Graphics (TOG), 22(3):595–604, 2003. 2.3
- [40] LUEBKE, D.; GEORGES, C.. **Portals and mirrors: simple, fast evaluation of potentially visible sets**. In: PROCEEDINGS OF THE 1995 SYMPOSIUM ON INTERACTIVE 3D GRAPHICS. ACM New York, NY, USA, 1995. 2.1.2, 2.3
- [41] MAHOVSKY, J. A.. **Ray tracing with reduced-precision bounding volume hierarchies**. PhD thesis, University of Calgary, Calgary, Alta., Canada, Canada, 2005. 7.2
- [42] Microstation. <http://www.bentley.com/>, visitado em 23/01/09. 3.4
- [43] MILLINGTON, I.. **Game Physics Engine Development (The Morgan Kaufmann Series in Interactive 3D Technology)**. Morgan Kaufmann, San Francisco, 2007. 3.2.3
- [44] MÖLLER, T.. **Real-time rendering**. A. K. Peters, Ltd., Natick, MA, USA, 2008. 3.2.3, 5.1.1
- [45] MÖLLER, T.; HAINES, E.. **Real-time rendering**. A. K. Peters, Ltd., Natick, MA, USA, 1999. 2.1.2, 3.1, 3.2.1
- [46] MORA, F.; AVENEAU, L. ; MERIAUX, M.. **Coherent and exact polygon-to-polygon visibility**. Proceedings of Winter School on Computer Graphics 2005, p. 87–94, 2005. 2.3
- [47] MOREIRA, F.; COMBA, J. ; FREITAS, C.. **Smart visible sets for networked virtual environments**. In: COMPUTER GRAPHICS AND IMAGE PROCESSING, 2002. PROCEEDINGS. XV BRAZILIAN SYMPOSIUM ON, p. 373–380, 2002. 2.3
- [48] NIELS THRANE, L. O. S.. **A comparison of acceleration structures for gpu assisted ray tracing**. Master's thesis, University of Aarhus, August 2005. 1.3, 3.2.5, 5.5
- [49] NIRENSTEIN, S.. **Fast and accurate visibility preprocessing**. PhD thesis, University of Cape Town, 2003. 2.3
- [50] Obj. Especificação do arquivo, <http://local.wasp.uwa.edu.au/~pbourke/-dataformats/obj/>, visitado em 29/01/09. 3.4

- [51] OMOHUNDRO, S. M.. **Five Balltree Construction Algorithms**. Technical report, International Computer Science Institute, December 1989. 3.2.3
- [52] **Openmp**. Open Multi-Processing, <http://openmp.org/wp/>, visitado em 29/01/09. 4.7
- [53] PALLISTER, K.. **Game Programming Gems**, volume 5, p. 65–76. Charles River Media, Rockland, February 2005. 1.3, 3.2.2
- [54] PONCE, J.; FAUGERAS, O.. **An object centered hierarchical representation for 3d objects: the prism tree**. *Comput. Vision Graph. Image Process.*, 38(1):1–28, 1987. 3.2.1
- [55] **Posix threads**. POSIX Threads, <https://computing.llnl.gov/tutorials/pthreads/>, visitado em 9/06/09. 7.2
- [56] **libqglviewer**. <http://www.libqglviewer.com/>, visitado em 23/01/09. 3.4
- [57] **Qt**. <http://www.qtsoftware.com/>, visitado em 23/01/09. 3.4
- [58] RESHETOV, A.. **Apparatus and method for a frustum culling algorithm suitable for hardware implementation**, June 19 2008. US Patent App. 12/142,668. 3.2.4, 7.2
- [59] ROBERTS, L.. **Machine perception of three-dimensional solids**. Technical report, Massachusetts Institute of Technology, 1963. 2.1
- [60] SALOMON, D.. **Transformations and Projections in Computer Graphics**. Springer, New York, 2006. 3
- [61] SCHAUFLER, G.; DORSEY, J.; DECORET, X. ; SILLION, F.. **Conservative volumetric visibility with occluder fusion**. In: PROCEEDINGS OF THE 27TH ANNUAL CONFERENCE ON COMPUTER GRAPHICS AND INTERACTIVE TECHNIQUES, p. 229–238. ACM Press/Addison-Wesley Publishing Co. New York, NY, USA, 2000. 2.3
- [62] SCHMALSTIEG, D.; TOBLER, R. F.. **Fast projected area computation for three-dimensional bounding boxes**. *J. Graph. Tools*, 4(2):37–43, 1999. 2.1.2
- [63] SLATER, M.; CHRYSANTHOU, Y.. **View volume culling using a probabilistic caching scheme**. In: PROCEEDINGS OF THE ACM SYMPOSIUM ON VIRTUAL REALITY SOFTWARE AND TECHNOLOGY, p. 71–77. ACM New York, NY, USA, 1997. 2.2

- [64] ST-LAURENT, S.. **Shaders for Game Programmers and Artists (Premier Press Game Development)**. Course Technology Ptr, Cambridge, 2004. 2
- [65] STEWART, J.. **An investigation of simd instruction sets**. <http://noisymime.org/blogimages/SIMD.pdf>, visitado em 22/01/09, 2005. 3.2.6
- [66] SUNAR, M.; ZIN, A. ; SEMBOK, T.. **Range detection approach in interactive virtual heritage walkthrough**. In: PROCEEDINGS OF THE 16TH INTERNATIONAL CONFERENCE ON ARTIFICIAL REALITY AND TELEXISTENCE–WORKSHOPS, volume 0, p. 599–602, Los Alamitos, CA, USA, 2006. IEEE Computer Society. 4.2
- [67] Tecgraf. **Tecnologia em Computação Gráfica**, <http://www.tecgraf.puc-rio.br/>, visitado em 29/01/09. 3.4
- [68] TELLER, S.; SEQUIN, C.. **Visibility preprocessing for interactive walkthroughs**. In: PROCEEDINGS OF THE 18TH ANNUAL CONFERENCE ON COMPUTER GRAPHICS AND INTERACTIVE TECHNIQUES, p. 61–70. ACM New York, NY, USA, 1991. 2.3
- [69] THOMAS H. CORMEN, CHARLES E. LEISERSON, R. R. L.. **Introduction to Algorithms**. The MIT Press, London, 1990. 1
- [70] TOLEDO, R.. **Interactive Visualization of Massive Data using Programmable Graphics Cards**. PhD thesis, Loria, INRIA institute, 2007. (document), 1.3, 5.1.1, 5.2, 5.4, 5.5, 5.2, 5.2
- [71] **Instruction latencies and throughput for amd and intel x86 processors**. <http://gmplib.org/tege/x86-timing.pdf>, visitado em 03/08/09. 4.2
- [72] VERTH, J.; BISHOP, L.. **Essential mathematics for games and interactive applications**. Morgan Kaufmann, San Francisco, 2004. 3.2.1
- [73] WALD, I.. **Realtime ray tracing and interactive global illumination**. PhD thesis, Universitätsbibliothek, 2004. 1.1
- [74] WATT, A. H.. **3D Computer Graphics (3rd Edition)**. Addison Wesley, Toronto, 1999. 3
- [75] WONKA, P.; SCHMALSTIEG, D.. **Occluder shadows for fast walkthroughs of urban environments**. In: COMPUTER GRAPHICS FORUM, volume 18, p. 51–60. Blackwell Publishers Ltd, 1999. 2.3

- [76] WONKA, P.; WIMMER, M. ; SCHMALSTIEG, D.. **Visibility preprocessing with occluder fusion for urban walkthroughs.** *Rendering Techniques 2000*, p. 71–82, 2000. 2.3
  
- [77] ZHANG, H.; MANOCHA, D.; HUDSON, T. ; HOFF III, K.. **Visibility culling using hierarchical occlusion maps.** In: *PROCEEDINGS OF THE 24TH ANNUAL CONFERENCE ON COMPUTER GRAPHICS AND INTERACTIVE TECHNIQUES*, p. 77–88. ACM Press/Addison-Wesley Publishing Co. New York, NY, USA, 1997. 2.3