- [1] Adelson EH and Bergen JR (1991) **The Plenoptic Function and the Elements of Early Vision**. In MS Landy and JA Movshon (Eds.), Computational Models of Visual Processing, pp. 3–20. MIT Press, Cambridge, MA URL http://web.mit.edu/persci/people/adelson/pub_pdfs/elements91.pdf
- [2] Agarwal P, Guibas L, Nguyen A, Russel D and Zhang L (2004) Collision Detection for Deforming Necklaces. Comput Geom Theory Appl (CGTA) 28(2-3), 137–163. ISSN 0925-7721. DOI:10.1016/j.comgeo.2004.03.008 URL http://graphics.stanford.edu/~anguyen/papers/necklaces_journal.pdf
- [3] Agarwal PK, Guibas LJ, Edelsbrunner H, Erickson J, Isard M, Har-Peled S, Hershberger J, Jensen C, Kavraki L, Koehl P, Lin M, Manocha D, Metaxas D, Mirtich B, Mount D, Muthukrishnan S, Pai D, Sacks E, Snoeyink J, Suri S and Wolefson O (2002) Algorithmic Issues in Modeling Motion. ACM Comput Surv 34(4), 550–572. ISSN 0360-0300. DOI:10.1145/592642.592647 URL http://compgeom.cs.uiuc.edu/~jeffe/pubs/pdf/motwork.pdf
- [4] Agrawala M, Zorin D and Munzner T (2000) Artistic Multiprojection Rendering. In Proc. Eurographics Workshop on Rendering Techniques (EWRT), pp. 125–136. Springer-Verlag. ISBN 3-211-83535-0 URL http://graphics.stanford.edu/papers/mpr/
- [5] Akenine-Möller T and Haines E (2002) Real-time Rendering. AK Peters Ltd. ISBN 1568811829
 URL http://www.realtimerendering.com/
- [6] Alliez P and Gotsman C (2005) Recent Advances in Compression of 3D Meshes. In N Dodgson, M Floater and M Sabin (Eds.), Advances in Multiresolution for Geometric Modelling, pp. 3–26. Springer-Verlag. ISBN 3-540-21462-3 URL http://www.inria.fr/rrrt/rr-4966.html
- [7] Alliez P, Ucelli G, Grotsman C and Attene M (2005). Recent Advances in Remeshing of Surfaces. URL http://www-sop.inria.fr/geometrica/team/Pierre.Alliez/
- [8] Amanatides J and Choi K (1997) Ray Tracing Triangular Meshes. In Proc. 8th Western Comp. Graph. Sympos. (WCGS), pp. 43–52 URL http://www.cs.yorku.ca/~amana/research/mesh.pdf

- [9] Amenta N, Bern M and Eppstein D (1998) The Crust and the β-Skeleton: Combinatorial Curve Reconstruction. Graph Models Image Process (GMIP) 60(2), 125–135. ISSN 1077-3169. DOI:10.1006/gmip.1998.0465 URL http://www.cs.ucdavis.edu/~amenta/pubs/crust.ps.gz
- [10] Amenta N, Choi S and Kolluri RK (2001) The Power Crust. In Proc. 6th ACM Symp. Solid Modeling and Applications (SMA), pp. 249–266. ACM Press. ISBN 1-58113-366-9. DOI:10.1145/376957.376986 URL http://www.cs.ucdavis.edu/~amenta/pubs/sm.pdf
- [11] Andersson A (1993) **Balanced Search Trees Made Simple**. In *Proc. 3rd Workshop on Algorithms and Data Structures (WADS)*, pp. 60–71. Springer-Verlag. ISBN 3-540-57155-8

 URL http://user.it.uu.se/~arnea/ps/simp.pdf
- [12] Arya S and Fu HYA (2000) Expected-case Complexity of Approximate Nearest Neighbor Searching. In Proc. 11th ACM-SIAM Symp. on Discrete Algorithms (SODA), pp. 379–388. SIAM Press. ISBN 0-89871-453-2 URL http://www.cs.ust.hk/faculty/arya/pub/
- [13] Arya S and Mount DM (1993) Approximate Nearest Neighbor Queries in Fixed Dimensions. In Proc. 4th ACM-SIAM Symp. Discrete Algorithms (SODA), pp. 271–280. Society for Industrial and Applied Mathematics. ISBN 0-89871-313-7 URL http://www.cs.ust.hk/faculty/arya/pub/
- [14] Asano T, Katoh N, Obokata K and Tokuyama T (2002) Combinatorial and Geometric Problems Related to Digital Halftoning. In Theoretical Foundations of Computer Vision, pp. 58–71 URL http://www.jaist.ac.jp/~t-asano/e-index.htm
- [15] Attali D (1997) r-Regular Shape Reconstruction from Unorganized Points. In Proc. 13th Comp. Geom. (SoCG), pp. 248–253. ACM Press. ISBN 0-89791-878-9. DOI:10.1145/262839.262980 URL http://www.lis.inpg.fr/pages_perso/attali/publications.html
- [16] Aurenhammer F (1987) Power Diagrams: Properties, Algorithms, and Applications. SIAM J Comput 16(1), 78–96. ISSN 0097-5397 URL http://www.igi.tugraz.at/auren/
- [17] Avidan S and Shashua A (1997) Novel View Synthesis in Tensor Space. In Conference on Computer Vision and Pattern Recognition (CVPR), p. 1034. IEEE CS Press. ISBN 0-8186-7822-4 URL http://www.cs.huji.ac.il/~shashua/
- [18] Avnaim F, Boissonnat JD, Devillers O, Preparata FP and Yvinec M (1997) Evaluating Signs of Determinants Using Single-precision Arithmetic. Algorithmica 17(2), 111–132
 URL http://www.inria.fr/rrrt/rr-2306.html

[19] Baker S and Matthews I (2004) Lucas-Kanade 20 Years On: A Unifying Framework. Int J Comput Vision (IJCV) 56(3), 221–255. ISSN 0920-5691. DOI: 10.1023/B: VISI.0000011205.11775.fd URL http://www.ri.cmu.edu/pubs/pub_4031.html

- [20] Balaban IJ (1995) An Optimal Algorithm for Finding Segment Intersections. In Proc. 11th Comp. Geom. (SoCG), pp. 211–219. ACM Press. ISBN 0-89791-724-3
- [21] Banachowski L (1980) A Complement To Tarjan's Result about the Lower Bound On the Complexity of the Set Union Problem. Inf Proc Letters (IPL) 11(2), 59–65. ISSN 0020-0190 URL http://www.bd.pjwstk.edu.pl/lechb_eng.htm
- [22] Banerjee A, Merugu S, Dhillon IS and Ghosh J (2004) Clustering with Bregman Divergences. In DS C Kamath (Ed.), SIAM Data Mining (SDM), pp. 234–245,. SIAM Press
 URL http://www.cs.utexas.edu/users/inderjit/public_papers/sdm-breg.pdf
- [23] Barbosa V (1996) An Introduction to Distributed Algorithms. MIT Press. ISBN 0-262-02412-8
 URL http://www.cos.ufrj.br/~valmir/ida.html
- [24] Basch J, Comba J, Guibas LJ, Hershberger J, Silverstein CD and Zhang L (1999) Kinetic Data Structures: Animating Proofs Through Time. In Proc. 15th Comp. Geom. (SoCG), pp. 427–428. ACM Press. ISBN 1-58113-068-6. DOI:10.1145/304893.305004

 URL http://graphics.stanford.edu/~comba/papers/socg.pdf
- [25] Beier T and Neely S (1992) Feature-based Image Metamorphosis. In Proc. 19th Comp. Graph. (SIGGRAPH), pp. 35–42. ACM Press. ISBN 0-89791-479-1. DOI:10. 1145/133994.134003
 URL http://www.hammerhead.com/thad/thad.html
- [26] Ben-Or M (1983) Lower Bounds for Algebraic Computation Trees. In Proc. 15th Sympos. Theory of Computing (STOC), pp. 80–86. ACM Press. ISBN 0-89791-099-0 URL http://www.cs.huji.ac.il/~benor/
- [27] Benedetto JJ and Ferreira PJSG (2001) Modern Sampling Theory: Mathematics and Applications. Applied and Numerical Harmonic Analysis Series. Birkhauser, Boston. ISBN 0817640231 URL http://www.ieeta.pt/~pjf/MSTMA/index.html
- [28] Bennett MK (1995) **Affine and Projective Geometry**. Wiley. ISBN 0-471-11315-8 URL http://www.math.umass.edu/Fac_Staff_Students/Faculty/bennett.html
- [29] Bentley JL (1975) Multidimensional Binary Search Trees Used for Associative Searching. Commun ACM (CACM) 18(9), 509–517. ISSN 0001-0782. DOI:10.1145/ 361002.361007 URL http://www.research.avayalabs.com/

- [30] Bentley JL and Friedman JH (1979) Data Structures for Range Searching. ACM Comput Surv 11(4), 397–409. ISSN 0360-0300. DOI:10.1145/356789.356797 URL http://www.research.avayalabs.com/
- [31] Bentley JL and Ottmann TA (1979) Algorithms for Reporting and Counting Geometric Intersections. IEEE Transactions on Computers C-28(9) URL http://www.research.avayalabs.com/
- [32] Bentley JL and Shamos MI (1976) **Divide-and-conquer in Multidimensional Space**. In *Proc. 8th Sympos. Theory of Computing (STOC)*, pp. 220–230. ACM Press URL http://www.research.avayalabs.com/
- [33] Besl PJ and McKay ND (1992) A Method for Registration of 3D Shapes. IEEE Trans Pattern Anal Mach Intell (TPAMI) 14(2), 239–256. ISSN 0162-8828. DOI: 10.1109/34.121791
 URL http://www.eecs.umich.edu/~mckay/
- [34] Bhat P, Ingram S and Turk G (2004) **Geometric Texture Synthesis by Example**. In *Proc. Sympos. Geometry Processing (SGP)*, pp. 43–46. ACM Press URL http://www.cc.gatech.edu/~turk/geom_synth/geom_synth.html
- [35] Blinn JF (1998) W Pleasure, W Fun. IEEE Comput Graph Appl (CGA) 18(3), 78–82. ISSN 0272-1716. DOI:10.1109/38.674975 URL http://research.microsoft.com/users/blinn/
- [36] Blinn JF and Newell ME (1976) Texture and Reflection in Computer Generated Images. Commun ACM (CACM) 19(10), 542–547 URL http://research.microsoft.com/users/blinn/
- [37] Blum M, Floyd RW, Pratt VR, Rivest RL and Tarjan RE (1973) Time Bounds for Selection. J Comput Syst Sci (JCSS) 7(4), 448–461 URL http://http.cs.berkeley.edu/~blum/
- [38] Blum M and Kanna S (1989) **Designing Programs That Check Their Work**. In *Proc. 21st Sympos. Theory of Computing (STOC)*, pp. 86–97. ACM Press. ISBN 0-89791-307-8. DOI:10.1145/73007.73015

 URL http://www.cis.upenn.edu/~kannan/home.html
- [39] Blumberg BM and Maes P (1997) Old Tricks, New Dogs: Ethology and Interactive Creatures. Ph.D. thesis, MIT

 URL http://web.media.mit.edu/~bruce/Site01.data/tricks.pdf
- [40] Boissonnat JD (1984) Geometric Structures for Three-dimensional Shape Representation. ACM Trans Graph (TOG) 3(4), 266–286. ISSN 0730-0301. DOI: 10.1145/357346.357349

 URL http://www-sop.inria.fr/geometrica/team/JeanDaniel.Boissonnat/index.html
- [41] Boissonnat JD, Cérézo A, Devillers O, Duquesne J and Yvinec M (1996) An Algorithm for Constructing the Convex Hull of a Set of Spheres in Dimension d. Comput Geom Theory Appl (CGTA) 6(2), 123–130. ISSN 0925-7721. DOI:10.1016/0925-7721(95)00024-0 URL http://www.inria.fr/rrrt/rr-2080.html

[42] Boissonnat JD, Devillers O, Pion S, Teillaud M and Yvinec M (2002) **Triangulations** in **CGAL**. Comput Geom Theory Appl (CGTA) **22**, 5–19
URL ftp://ftp-sop.inria.fr/geometrica/pion/publis/triangulations_in_cgal_cgta.pdf

- [43] Boissonnat JD, Devillers O, Schott R, Teillaud M and Yvinec M (1992) Applications of Random Sampling to On-line Algorithms in Computational Geometry. Discrete Comput Geom (DCG) 8, 51–71 URL http://www-sop.inria.fr/prisme/publis/bdsty-arsol-92.ps.gz
- [44] Boissonnat JD, Guibas LJ and Oudot S (2004) Learning Surfaces by Probing. Tech. Rep. 5434, INRIA URL http://www.inria.fr/rrrt/rr-5434.html
- [45] Boissonnat JD and Preparata FP (2000) Robust Plane Sweep for Intersecting Segments. SIAM Journal on Computing 29(5), 1401–1421 URL http://www.inria.fr/rrrt/rr-3270.html
- [46] Boissonnat JD and Snoeyink J (1999) Efficient Algorithms for Line and Curve Segment Intersection Using Restricted Predicates. In Proc. 15th Comp. Geom. (SoCG), pp. 370–379. ACM Press. ISBN 1-58113-068-6. DOI:10.1145/304893.304991 URL http://www.cs.unc.edu/~snoeyink/papers/papers.html
- [47] Boissonnat JD and Teillaud M (1986) A Hierarchical Representation of Objects: The Delaunay Tree. In Proc. 2nd Comp. Geom. (SoCG), pp. 260–268
 URL http://www-sop.inria.fr/geometrica/team/JeanDaniel.Boissonnat/index.html
- [48] Boissonnat JD and Teillaud M (1993) On the Randomized Construction of the Delaunay Tree. Theor Comput Sci (TCS) 112(2), 339–354. ISSN 0304-3975. DOI: 10.1016/0304-3975(93)90024-N URL http://www.inria.fr/rrrt/rr-1140.html
- [49] Boissonnat JD and Yvinec M (1998) Algorithmic Geometry. Cambridge University Press. ISBN 0-521-56529-4 URL http://www-sop.inria.fr/geometrica/team/Mariette.Yvinec/livre.html
- [50] Bouguet JY (1999) Pyramidal Implementation of the Lucas-Kanade Feature Tracker Description of the Algorithm. Technical report URL http://www.intel.com/technology/techresearch/people/bios/bouguet_j.htm
- [51] Bouguet JY (2004) Camera Calibration Toolbox for Matlab[®]. Technical report, Vision CalTech URL http://www.vision.caltech.edu/bouguetj/calib_doc/index.html
- [52] Bracewell RN (2003) Fourier Analysis and Imaging. Plenum Publishing Corporation. ISBN 0306481871 URL http://www-star.stanford.edu/starlab_web_20030912/people/bracewell.html
- [53] Bradshaw G and O'Sullivan C (2004) Adaptive Medial-axis Approximation for Sphere-Tree Construction. ACM Trans Graph (TOG) 23(1), 1–26. ISSN 0730-0301. DOI:10.1145/966131.966132 URL http://isg.cs.tcd.ie/spheretree/

- [54] Briceno HM, Sander PV, McMillan L, Gortler S and Hoppe H (2003) Geometry Videos: A New Representation for 3D Animations. In Proc. ACM SIG-GRAPH/Eurographics Sympos. Computer Animation (SCA), pp. 136–146. Eurographics Association. ISBN 1-58113-659-5 URL http://research.microsoft.com/~hoppe/gvid.pdf
- [55] Brönnimann H (1995) Derandomization of Geometric Algorithms. Ph.D. thesis, Princeton, NJ, USA URL http://photon.poly.edu/~hbr/
- [56] Brönnimann H, Burnikel C and Pion S (2001) Interval Arithmetic Yields Efficient Dynamic Filters for Computational Geometry. Discrete Applied Mathematics 109(1-2), 25–47 URL http://photon.poly.edu/~hbr/publis.html
- [57] Brönnimann H, Chan TM and Chen EY (2004) Towards In-place Geometric Algorithms and Data Structures. In Proc. 20th Comp. Geom. (SoCG), pp. 239–246. ACM Press, New York, NY, USA. ISBN 1-58113-885-7. DOI:10.1145/997817.997854 URL http://photon.poly.edu/~hbr/publi/inplace-ch3d/inplace-ch3d.pdf
- [58] Brönnimann H and Devillers O (1999) The Union of Unit Balls Has Quadratic Complexity, Even If They All Contain the Origin. CoRR cs.CG/9907025 URL http://www.inria.fr/rrrt/rr-3758.html
- [59] Brönnimann H, Emiris IZ, Pan VY and Pion S (1997) Computing Exact Geometric Predicates Using Modular Arithmetic with Single-precision. In Proc. 13th Comp. Geom. (SoCG), pp. 174–182. ACM Press. ISBN 0-89791-878-9. DOI:10.1145/ 262839.262948 URL http://www.inria.fr/rrrt/rr-3213.html
- [60] Brown DC (1966) **Decentering Distortion of Lenses**. Photometric Engineering **32**(3)
- [61] Brown M and Lowe DG (2003) **Recognising Panoramas**. In *Proc. 9th International Conference on Computer Vision (ICCV)*, pp. 1218–1227. IEEE CS Press URL http://www.cs.ubc.ca/~mbrown/papers/iccv2003.pdf
- [62] Bădoiu M and Clarkson KL (2003) Smaller Core-sets for Balls. In Proc. 14th ACM-SIAM Symp. Discrete Algorithms (SODA), pp. 801–802. SIAM Press. ISBN 0-89871-538-5 URL http://cm.bell-labs.com/who/clarkson/coresets2.pdf
- [63] Burnikel C, Funke S and Seel M (2001) Exact Geometric Computation Using Cascading. Int J Comput Geometry Appl (IJCGA) 11(3), 245–266
 URL http://graphics.stanford.edu/~sfunke/Papers/SoCG98/EXPCOMP.pdf
- [64] Burt PJ and Adelson EH (1983) The Laplacian Pyramid as a Compact Image Code. IEEE Trans Communications 31(4), 532–540 URL http://web.mit.edu/persci/people/adelson/publications.html
- [65] Burt PJ and Adelson EH (1983) A Multiresolution Spline with Application to Image Mosaics. ACM Trans Graph (TOG) 2(4), 217–236. ISSN 0730-0301. DOI:

- 10.1145/245.247 URL http://web.mit.edu/persci/people/adelson/publications.html
- [66] Buss SR (2003) **3D Computer Graphics: A Mathematical Introduction with OpenGL**. Cambridge University Press. ISBN 0521821037 URL http://math.ucsd.edu/~sbuss/MathCG/index.html
- [67] Buss SR and Fillmore JP (2001) Spherical Averages and Applications to Spherical Splines and Interpolation. ACM Trans Graph (TOG) 20(2), 95–126. ISSN 0730-0301. DOI:10.1145/502122.502124 URL http://math.ucsd.edu/~sbuss/ResearchWeb/spheremean/
- [68] Cabral B, Olano M and Nemec P (1999) Reflection Space Image-based Rendering. In Proc. 26th Comp. Graph. (SIGGRAPH), pp. 165-170. ACM Press/Addison-Wesley Publishing Co. ISBN 0-201-48560-5. DOI:10.1145/311535.311553 URL http://www.cs.unc.edu/~olano/papers/cc360.pdf
- [69] Capel D (2004) Image Mosaicing and Superresolution. Series: Distinguished Dissertations. Springer Verlag, 1st edition. ISBN 1-85233-771-0
- [70] Chai JX, Chan SC, Shum HY and Tong X (2000) Plenoptic Sampling. In Proc. 27th Comp. Graph. (SIGGRAPH), pp. 307–318. ACM Press/Addison-Wesley Publishing Co. ISBN 1-58113-208-5. DOI:10.1145/344779.344932 URL http://graphics.cs.cmu.edu/projects/plenoptic-sampling/ps_projectpage.htm
- [71] Chang EC and Yap CK (1997) **A Wavelet Approach to Foveating Images**. In *Proc.* 13th Comp. Geom. (SoCG), pp. 397–399. ACM Press, New York, NY, USA. ISBN 0-89791-878-9. DOI:10.1145/262839.263024

 URL http://www.comp.nus.edu.sg/~changec/publications/foveation_short.pdf
- [72] Chaudhry G, Cormen TH and Hamon EA (2004) Parallel Out-of-core Sorting: The Third Way. Technical Report TR2004-517, Dartmouth College, Computer Science, Hanover, NH

 URL http://www.cs.dartmouth.edu/~geetac/ccs.pdf
- [73] Chazelle B (1986) **Reporting and Counting Segment Intersections**. J Comput Syst Sci (JCSS) **32**(2), 156–182. ISSN 0022-0000 URL http://www.cs.princeton.edu/~chazelle/
- [74] Chazelle B (1991) An Optimal Convex Hull Algorithm and New Results on Cuttings. In Proc. 32nd Foundations of Computer Science (FOCS), pp. 29–38. IEEE CS Press. ISBN 0-8186-2445-0 URL http://www.cs.princeton.edu/~chazelle/
- [75] Chazelle B (2000) **The Discrepancy Method: Randomness and Complexity**. Cambridge University Press. ISBN 0-521-00357-1 URL http://www.cs.princeton.edu/~chazelle/book
- [76] Chazelle B and Guibas LJ (1986) Fractional Cascading: I. A Data Structuring Technique. Algorithmica 1(2), 133–162 URL http://www.cs.princeton.edu/~chazelle/

- [77] Chen SE (1995) QuickTime VR[®]: An Image-based Approach to Virtual Environment Navigation. In *Proc. 22nd Comp. Graph. (SIGGRAPH)*, pp. 29–38. ACM Press. ISBN 0-89791-701-4. *DOI:10.1145/218380.218395*
- [78] Chen SE and Williams L (1993) View Interpolation for Image Synthesis. In Proc. 20th Comp. Graph. (SIGGRAPH), pp. 279–288. ACM Press. ISBN 0-89791-601-8. DOI:10.1145/166117.166153
- [79] Chew LP (1990) Building Voronoi Diagrams for Convex Polygons in Linear Expected Time. Technical report, Dartmouth College, Computer Science URL http://www.cs.cornell.edu/Info/People/chew/chew.html
- [80] Cignoni P, Montani C and Scopigno R (1998) A Comparison of Mesh Simplification Algorithms. Computers & Graphics 22(1), 37–54. DOI:10.1016/S0097-8493(97) 00082-4 URL http://www.isti.cnr.it/ResearchUnits/Labs/vc-lab/
- [81] Clarkson KL (1992) **Safe and Effective Determinant Evaluation**. In *Proc. 31st Foundations of Computer Science (FOCS)*, pp. 387–395. IEEE CS Press URL http://cm.bell-labs.com/cm/cs/who/clarkson/dets.html
- [82] Clarkson KL and Shor PW (1989) Applications of Random Sampling in Computational Geometry II. Discrete Comput Geom (DCG) 4(5), 387–421. ISSN 0179-5376 URL http://cm.bell-labs.com/who/clarkson/rs2m.html
- [83] Cohen MF, Shade J, Hiller S and Deussen O (2003) Wang Tiles for Image and Texture Generation. ACM Trans Graph (TOG) 22(3), 287–294. ISSN 0730-0301. DOI:10.1145/882262.882265
 URL http://research.microsoft.com/~cohen/WangFinal.pdf
- [84] Cohen-Steiner D, Alliez P and Desbrun M (2004) Variational Shape Approximation. ACM Trans Graph (TOG) 23(3), 905–914. ISSN 0730-0301. DOI:10.1145/1015706.1015817
 URL http://www.inria.fr/rrrt/rr-5371.html
- [85] Coleman P and Singh K (2004) Ryan: Rendering Your Animation Nonlinearly Projected. In Proc. 3rd Int. Symp. Non-photo-realistic Animation and Rendering (NPAR), pp. 129–156. ACM Press. ISBN 1-58113-887-3. DOI:10.1145/987657.987678 URL http://www.dgp.toronto.edu/~patrick/papers/ryanNpar2004/
- [86] Conway JH and Smith DA (2003) On Quaternions and Octonions: Their Geometry, Arithmetic, and Symmetry. AK Peters, Natik, Massachusetts. ISBN 1568811349 URL http://www.math.princeton.edu/
- [87] Cormen TH, Stein C, Rivest RL and Leiserson CE (2001) Introduction to Algorithms. McGraw-Hill Higher Education. ISBN 0070131511 URL http://theory.lcs.mit.edu/~clr/
- [88] Coxeter H (1987) **Projective Geometry**. Springer-Verlag URL http://www.math.toronto.edu/~coxeter/

[89] Crow FC (1984) Summed-area Tables for Texture Mapping. In Proc. 11th Comp. Graph. (SIGGRAPH), pp. 207–212. ACM Press, New York, NY, USA. ISBN 0-89791-138-5

- URL $http://accad.osu.edu/\sim waynec/history/ACCAD-overview/overview3.html$
- [90] Cunto W and Munro JI (1989) Average Case Selection. J ACM (JACM) 36(2), 270–279. ISSN 0004-5411. DOI:10.1145/62044.62047 URL http://db.uwaterloo.ca/~imunro/
- [91] de Berg M, van Kreveld M, Overmars M and Schwarzkopf O (1997) **Computational Geometry: Algorithms and Applications**. Springer-Verlag. ISBN 3-540-61270-X URL http://www.cs.uu.nl/geobook/
- [92] Debevec PE, Hawkins T, Tchou C, Duiker HP, Sarokin W and Sagar M (2000) Acquiring the Reflectance Field of a Human Face. In Proc. 27th Comp. Graph. (SIGGRAPH), pp. 145–156. ACM Press/Addison-Wesley. ISBN 1-58113-208-5. DOI:10.1145/344779.344855 URL http://www.debevec.org/Research/LS/
- [93] Debevec PE and Malik J (1997) Recovering High-dynamic Range Radiance Maps from Photographs. In Proc. 24th Comp. Graph. (SIGGRAPH), pp. 369-378. ACM Press/Addison-Wesley Publishing Co. ISBN 0-89791-896-7. DOI:10.1145/258734. 258884 URL http://www.debevec.org/Research/HDR/
- [94] Debevec PE, Reinhard E, Ward G and Pattanaik S (2004) High-dynamic Range Imaging. Course Notes #13, ACM SIGGRAPH URL http://www.debevec.org/HDRI2004/
- [95] Dempster A, Laird N and Rubin D (1977) Maximum Likelihood from Incomplete Data via the EM Algorithm. Journal Royal Stat Soc, Series B 39(1), 1–38 URL http://www.stat.harvard.edu/
- [96] DeRose T (1989) A Coordinate-free Approach to Geometric Programming. In W Strasser and HP Seidel (Eds.), Theory and Practice of Geometric Modeling, pp. 291–305. Springer-Verlag URL http://www.pixar.com/
- [97] Devillers O (2002) On Deletion in Delaunay Triangulation. Internat J Comput Geom Appl (CGA) 12, 193–205 URL http://www.inria.fr/rrrt/rr-3451.html
- [98] Devillers O and Pion S (2002) Efficient Exact Geometric Predicates for Delaunay Triangulations. Tech. Rep. 4351, INRIA URL http://www.inria.fr/rrrt/rr-4351.html
- [99] Devillers O, Pion S and Teillaud M (2001) Walking in a Triangulation. In Proc. 17th Comp. Geom. (SoCG), pp. 106-114. ACM Press. ISBN 1-58113-357-X. DOI: 10.1145/378583.378643 URL http://www.inria.fr/rrrt/rr-4120.html

- [100] Dey TK and Goswami S (2004) Provable Surface Reconstruction from Noisy Samples. In Proc. 12th Comp. Geom. (SoCG), pp. 330–339. ACM Press. ISBN 1-58113-885-7. DOI:10.1145/997817.997867 URL http://www.cse.ohio-state.edu/one/rcocone.pdf
- [101] Djurcilov S, Kim K, Lermusiaux PFJ and Pang A (2001) Volume Rendering Data with Uncertainty Information. In Data Visualization: Joint Eurographics IEEE TCVG Symposium on Visualization, pp. 243–252. Springer Verlag. ISBN 3-211-83674-8 URL http://people.deas.harvard.edu/~pierrel/Papers/visual.pdf
- [102] Durand F (2002) An Invitation to Discuss Computer Depiction. In Proc. 2nd Int. Symp. Non-photo-realistic Animation and Rendering (NPAR), pp. 111–124. ACM Press. ISBN 1-58113-494-0. DOI:10.1145/508530.508550 URL http://people.csail.mit.edu/fredo/PUBLI/NPAR02/
- [103] Dutré P, Jensen HW, Arvo J, Bala K, Bekaert P, Marschner S and Pharr M (2004) **State** of the Art in Monte Carlo Global Illumination. Course Notes #4, SIGGRAPH URL http://www.cs.kuleuven.ac.be/~phil/
- [104] Edelsbrunner H (1987) **Algorithms in Combinatorial Geometry**. Springer-Verlag. ISBN 0-387-13722-X URL http://www.cs.duke.edu/~edels/
- [105] Edelsbrunner H (1995) **The Union of Balls and Its Dual Shape**. Discrete & Computational Geometry (DCG) **13**, 415–440 URL http://www.cs.duke.edu/~edels/
- [106] Edelsbrunner H (2001) Geometry and Topology for Mesh Generation. Cambridge University Press. ISBN 0-521-79309-2 URL http://www.cs.duke.edu/~edels/
- [107] Edelsbrunner H and Mücke EP (1990) Simulation of Simplicity: A Technique to Cope with Degenerate Cases in Geometric Algorithms. ACM Trans Graph (TOG) 9(1), 66–104. ISSN 0730-0301. DOI:10.1145/77635.77639 URL http://www.cs.duke.edu/~edels/
- [108] Edelsbrunner H, Tan TS and Waupotitsch R (1990) An $O(n^2 \log n)$ Time Algorithm for the MinMax Angle Triangulation. In Proc. 6th Comp. Geom. (SoCG), pp. 44–52. ACM Press. ISBN 0-89791-362-0. DOI:10.1145/98524.98535 URL http://www.comp.nus.edu.sg/~tants/Paper/mma.pdf
- [109] Efros AA and Leung TK (1999) **Texture Synthesis by Non-parametric Sampling**. In *Proc. International Conference on Computer Vision (ICCV)*, volume 2, p. 1033. IEEE CS Press. ISBN 0-7695-0164-8
 URL http://www.cs.berkeley.edu/~efros/research/synthesis.html
- [110] Erickson J and Har-Peled S (2002) **Optimally Cutting a Surface into a Disk**. In *Proc. 18th Comp. Geom. (SoCG)*, pp. 244–253. ACM Press. ISBN 1-58113-504-1. DOI:10.1145/513400.513430
 URL http://compgeom.cs.uiuc.edu/~jeffe/pubs/pdf/schemax.pdf

[111] Fairchild M (1998) Color Appearance Models. Addison-Wesley, Reading, MA. ISBN 0-201-63464-3

URL http://www.cis.rit.edu/people/faculty/fairchild/CAM.html

- [112] Faugeras O (1993) Three-dimensional Computer Vision: A Geometric Viewpoint. MIT Press. ISBN 0-262-06158-9

 URL http://www-sop.inria.fr/robotvis/personnel/faugeras/faugeras-eng.html
- [113] Fiorio C and Gustedt J (1996) **Two Linear Time Union-find Strategies for Image Processing**. Theor Comput Sci (TCS) **154**(2), 165–181. ISSN 0304-3975. *DOI:10.* 1016/0304-3975(94)00262-2 URL http://www.lirmm.fr/~fiorio/
- [114] Fischer K and Gärtner B (2003) **The Smallest Enclosing Ball of Balls:** Combinatorial Structure and Algorithms. In Proc. 19th Comp. Geom. (SoCG), pp. 292–301. ACM Press. ISBN 1-58113-663-3. DOI:10.1145/777792.777836 URL http://www.ti.inf.ethz.ch/ew/courses/ApproxGeom05/paper/fischer_gaertner_03.pdf
- [115] Fischler MA and Bolles RC (1981) Random Sample Consensus: A Paradigm for Model Fitting with Applications to Image Analysis and Automated Cartography. Commun ACM (CACM) 24(6), 381–395. ISSN 0001-0782. DOI: 10.1145/358669.358692
 URL http://www.ai.sri.com/people/fischler/
- [116] Fishkin KP and Barsky BA (1984) A Family of New Algorithms for Soft Filling. In Proc. 11th Comp. Graph. (SIGGRAPH), pp. 235–244. ACM Press. ISBN 0-89791-138-5. DOI:10.1145/964965.808604 URL http://seattleweb.intel-research.net/people/fishkin/index.html
- [117] Floater MS (1997) Parametrization and Smooth Approximation of Surface Triangulations. Comput Aided Geom Des (CAGD) 14(3), 231–250. ISSN 0167-8396. DOI:10.1016/S0167-8396(96)00031-3
 URL http://heim.ifi.uio.no/~michaelf/papers/papers.html
- [118] Floater MS and Hormann K (2005) Surface Parameterization: A Tutorial and Survey. In NA Dodgson, MS Floater and MA Sabin (Eds.), Advances in Multiresolution for Geometric Modelling, Mathematics and Visualization, pp. 157–186. Springer, Berlin, Heidelberg

 URL http://heim.ifi.uio.no/~michaelf/papers/surfparam.pdf
- [119] Foley JD, van Dam A, Feiner SK and Hughes JF (1996) Computer Graphics: Principles and Practice. Addison-Wesley Longman Publishing Co., Inc. ISBN 0-201-84840-6 URL http://www.cc.gatech.edu/fac/Jim.Foley/foley.html
- [120] Fontijne D and Dorst L (2003) Modeling 3D Euclidean Geometry. IEEE Comput Graph Appl 23(2), 68–78. ISSN 0272-1716. DOI:10.1109/MCG.2003.1185582 URL http://staff.science.uva.nl/~leo/clifford/CGA3.pdf

- [121] Ford WH and Topp WR (2001) Data Structures with C++ Using STL. Prentice Hall PTR. ISBN 0130858501 URL http://bailey.cs.uop.edu/fordtopp/datastruct.html
- [122] Forsyth DA and Ponce J (2002) Computer Vision: A Modern Approach. Prentice-Hall. ISBN 0130851981 URL http://www.cs.berkeley.edu/~daf/book.html
- [123] Fortune S and Wyk CJV (1996) Static Analysis Yields Efficient Exact Integer Arithmetic for Computational Geometry. ACM Trans Graph (TOG) 15(3), 223– 248. ISSN 0730-0301. DOI:10.1145/231731.231735 URL http://cm.bell-labs.com/who/sjf/
- [124] Fredman M and Saks M (1989) **The Cell Probe Complexity of Dynamic Data Structures**. In *Proc. 21st Sympos. Theory of Computing (STOC)*, pp. 345–354. ACM Press. ISBN 0-89791-307-8. DOI:10.1145/73007.73040 URL http://www.dcis.rutgers.edu/cs/people/
- [125] Frigo M, Leiserson CE, Prokop H and Ramachandran S (1999) Cache-oblivious Algorithms. In Proc. 40th Proc. 45th Foundations of Computer Science (FOCS), p. 285. IEEE Computer Society. ISBN 0-7695-0409-4 URL http://www.fftw.org/~athena/papers.html
- [126] Fuchs H, Kedem ZM and Naylor B (1979) Predetermining Visibility Priority in 3D Scenes. In Proc. 6th Comp. Graph. (SIGGRAPH), pp. 175–181. ACM Press. ISBN 0-89791-004-4 URL http://www.cs.unc.edu/~fuchs/publications/PreDetermVis(PrelimRep)79.pdf
- [127] Fuchs H, Kedem ZM and Naylor BF (1980) On Visible Surface Generation by a Priori Tree Structures. In Proc. 7th Comp. Graph. (SIGGRAPH), pp. 124–133. ACM Press. ISBN 0-89791-021-4 URL http://www.cs.unc.edu/~fuchs/publications/
- [128] Funge JD (2004) Artificial Intelligence for Computer Games: An Introduction. AK Peters, Boston. ISBN 1568812086 URL http://www.dgp.toronto.edu/~funge/ai4games/
- [129] Gabow HN and Tarjan RE (1983) A Linear-time Algorithm for a Special Case of Disjoint Set Union. In Proc. 15th Sympos. Theory of Computing (STOC), pp. 246–251. ACM Press. ISBN 0-89791-099-0 URL http://www.cs.colorado.edu/~hal/
- [130] Gamma E, Helm R, Johnson R and Vlissides J (1995) **Design Patterns: Elements** of Reusable Object-oriented Software. Addison-Wesley
- [131] Garland M and Heckbert PS (1997) Surface Simplification Using Quadric Error Metrics. In Proc. 24th Comp. Graph. (SIGGRAPH), pp. 209–216. ACM Press/Addison-Wesley Publishing Co. ISBN 0-89791-896-7. DOI:10.1145/258734. 258849

 URL http://graphics.cs.uiuc.edu/~garland/research/quadrics.html

[132] Garland M and Heckbert PS (1998) Simplifying Surfaces with Color and Texture Using Quadric Error Metrics. In Proc. Conf. Visualization (VIS), pp. 263–269. ISBN 1-58113-106-2 URL http://graphics.cs.uiuc.edu/~garland/research/quadrics.html

- [133] Gärtner B (1999) Fast and Robust Smallest Enclosing Balls. In Proc. 7th European Symposium on Algorithms (ESA), volume 1643 of Lecture Notes in Computer Science, pp. 325–338. Springer-Verlag URL http://www.inf.ethz.ch/personal/gaertner/texts/own_work/esa99_final.pdf
- [134] Gilboa G, Sochen NA and Zeevi YY (2004) Image Enhancement and Denoising by Complex Diffusion Processes. IEEE Trans Pattern Anal Mach Intell (TPAMI) 26(8), 1020–1036. DOI:10.1109/TPAMI.2004.47

 URL http://www.math.ucla.edu/~gilboa/pub/PAMI_cmplx04_GSZ.pdf
- [135] Goldberg D (1991) What Every Computer Scientist Should Know About Floating-point Arithmetic. ACM Comput Surv 23(1), 5–48. ISSN 0360-0300. DOI:10.1145/103162.103163

 URL http://docs.sun.com/source/806-3568/ncg_goldberg.html
- [136] Golin M, Raman R, Schwarz C and Smid M (1995) **Simple Randomized Algorithms** for Closest Pair Problems. Nordic J of Computing **2**(1), 3–27. ISSN 1236-6064 URL http://www.cs.ust.hk/faculty/golin/
- [137] Golub GH and Loan CFV (1996) Matrix Computations. Johns Hopkins University Press, 3rd edition. ISBN 0-8018-5414-8

 URL http://sccm.stanford.edu/faculty/nf-golub.html
- [138] Goodrich M, Tamassia R and Mount DM (2002) Data Structures and Algorithms in C++. John Wiley and Sons. ISBN 0-471-20208-8 URL http://cpp.datastructures.net/
- [139] Goodrich MT, Guibas LJ, Hershberger J and Tanenbaum PJ (1997) **Snap Rounding Line Segments Efficiently in Two and Three Dimensions**. In *Proc. 13th Comp. Geom. (SoCG)*, pp. 284–293. ACM Press. ISBN 0-89791-878-9. *DOI:10.1145/262839. 262985*URL http://www.ics.uci.edu/~goodrich/pubs/index.html
- [140] Gortler SJ, Grzeszczuk R, Szeliski R and Cohen MF (1996) The Lumigraph. In Proc. 23rd Comp. Graph. (SIGGRAPH), pp. 43–54. ACM Press. ISBN 0-89791-746-4. DOI:10.1145/237170.237200 URL http://www.research.microsoft.com/~cohen/lumia.ps.gz
- [141] Gotsman C, Gu X and Sheffer A (2003) Fundamentals of Spherical Parameterization for 3D Meshes. ACM Trans Graph (TOG) 22(3), 358–363. ISSN 0730-0301. DOI:10.1145/882262.882276 URL http://www.cs.technion.ac.il/~sheffa/papers/SigCDV.pdf
- [142] Greene N (1986) Environment Mapping and Other Applications of World Projection. IEEE Comput Graphics Appl (CGA) 6(11), 21–29

- [143] Grewal MS and Andrews AP (1993) Kalman Filtering: Theory and Practice. Prentice-Hall, Inc. ISBN 0-13-211335-X URL http://mgrewal.ecs.fullerton.edu/
- [144] Gries D and Levin G (1980) Computing Fibonacci Numbers (and Similarly Defined Functions) in Log Time. Inf Process Lett (IPL) 11(2), 68–69 URL http://www.cs.cornell.edu/Info/People/gries/gries.html
- [145] Gross MH, Staadt OG and Gatti R (1996) Efficient Triangular Surface Approximations Using Wavelets and Quadtree Data Structures. IEEE Trans Vis & Comp Graph (TVCG) 2(2), 130–143. ISSN 1077-2626. DOI:10.1109/2945.506225 URL http://graphics.idav.ucdavis.edu/graphics/publications/print_pub?pub_id=448
- [146] Grossberg MD and Nayar SK (2003) What Is the Space of Camera Response Functions? In Proc. IEEE Conf. Computer Vision and Pattern Recognition (CVPR), pp. 602–609. IEEE CS Press URL http://www.cs.columbia.edu/CAVE/publinks/grossberg_CVPR_2003.pdf
- [147] Grossberg MD and Nayar SK (2005) The Raxel Imaging Model and Ray-based Calibration. Int J Comput Vision (IJCV) 61(2), 119–137. ISSN 0920-5691. DOI: 10.1023/B:VISI.0000043754.56350.10
- [148] Grzeszczuk R and Terzopoulos D (1995) Automated Learning of Muscle-actuated Locomotion Through Control Abstraction. In Proc. 22nd Comp. Graph. (SIGGRAPH), pp. 63–70. DOI:10.1145/218380.218411
 URL http://www.intel.com/technology/techresearch/people/bios/grzeszczuk_r.htm
- [149] Gu X (2003) Parametrization for Surfaces with Arbitrary Topologies. Ph.D. thesis, Harvard URL http://www.cise.ufl.edu/~qu/papers/thesis.pdf
- [150] Gu X, Gortler SJ and Hoppe H (2002) Geometry Images. In Proc. 29th Comp. Graph. (SIGGRAPH), pp. 355–361. ACM Press. ISBN 1-58113-521-1. DOI:10.1145/566570. 566589 URL http://www.cs.sunysb.edu/~gu/papers/gim.pdf
- [151] Gu X, Wang Y, Chan TF, Thompson PM and Yau ST (2003) **Genus Zero Surface**Conformal Mapping and Its Application to Brain Surface Mapping. In 18th
 Int. Conf. on Information Processing in Medical Imaging (IPMI), pp. 172–184
 URL http://www.cs.sunysb.edu/~gu/papers/tmi.v3.pdf
- [152] Guibas LJ, Knuth DE and Sharir M (1992) Randomized Incremental Construction of Delaunay and Voronoi Diagrams. Algorithmica 7(4), 381–413 URL http://geometry.stanford.edu/member/guibas/
- [153] Guibas LJ and Stolfi J (1985) Primitives for the Manipulation of General Subdivisions and Computation of Voronoi Diagrams. ACM Trans Graph (TOG) 4(2), 74–123
 URL http://www.dcc.unicamp.br/~stolfi/

[154] Guskov I, Khodakovsky A, Schröder P and Sweldens W (2002) Hybrid Meshes: Multiresolution Using Regular and Irregular Refinement. In Proc. 18th Comp. Geom. (SoCG), pp. 264–272. ACM Press. ISBN 1-58113-504-1. DOI:10.1145/513400. 513443 URL http://www.eecs.umich.edu/~guskov/hm-coarse.pdf

- [155] Guskov I, Vidimce K, Sweldens W and Schroeder P (2000) **Normal Meshes**. In *Proc.* 27th Comp. Graph. (SIGGRAPH), pp. 95–102. ACM Press/Addison-Wesley Publishing Co. ISBN 1-58113-208-5. DOI:10.1145/344779.344831
 URL http://www.cs.caltech.edu/~ivguskov/normalmesh.pdf
- [156] Guskov I and Wood ZJ (2001) Topological Noise Removal. In Graphics interface (GRIN), pp. 19–26. Canadian Information Processing Society. ISBN 0-9688808-0-0 URL http://www.multires.caltech.edu/pubs/tunnels.pdf
- [157] Har-Peled S and Sadri B (2005) **How Fast Is the** k-Means Method? Algorithmica 41(3), 185–202. DOI:10.1007/s00453-004-1127-9 URL http://valis.cs.uiuc.edu/~sariel/papers/03/lloyd_kmeans/kmeans.pdf
- [158] Har'El Z (1993) **Uniform Solution for Uniform Polyhedra**. Geometriae Dedicata **47**, 57–110 URL http://www.math.technion.ac.il/~rl/docs/uniform.pdf
- [159] Hartley RI and Zisserman A (2004) Multiple View Geometry in Computer Vision. Cambridge University Press, 2nd edition. ISBN 0521540518
- [160] Heckbert PS (1986) Survey of Texture Mapping. IEEE Comput Graph Appl (CGA) 6(11), 56–67. ISSN 0272-1716 URL http://www-2.cs.cmu.edu/~ph/texsurv.pdf
- [161] Heckbert PS (1989) Fundamentals of Texture Mapping and Image Warping. Technical report, Berkeley, CA, USA URL http://www-2.cs.cmu.edu/~ph/texfund/texfund.pdf
- [162] Heckbert PS (1994) Graphics Gems IV. Academic Press. ISBN 0-12-336155-9
- [163] Heidrich W and Seidel HP (1998) View-independent Environment Maps. In Proc. Workshop on Graphics Hardware (HWWS), pp. 39-ff. ACM Press, New York, NY, USA. ISBN 0-89791-097-X. DOI:10.1145/285305.285310 URL http://www.cs.ubc.ca/~heidrich/Papers/GH.98.pdf
- [164] Hertzmann A, Jacobs CE, Oliver N, Curless B and Salesin DH (2001) Image Analogies. In Proc. 28th Comp. Graph. (SIGGRAPH), pp. 327–340. ACM Press. ISBN 1-58113-374-X. DOI:10.1145/383259.383295 URL http://mrl.nyu.edu/projects/image-analogies/
- [165] Hoare CAR (1961) Algorithm 64: Quicksort. Commun ACM (CACM) 4(7), 321. ISSN 0001-0782. DOI:10.1145/366622.366644 URL http://research.microsoft.com/~thoare/
- [166] Hoare CAR (1961) Algorithm 65: Find. Commun ACM (CACM) 4(7), 321–322.
 ISSN 0001-0782. DOI:10.1145/366622.366647
 URL http://research.microsoft.com/~thoare/

- [167] Hoare CAR (1978) **Notes on Data Structuring**. In EDOJ Dahl and CAR Hoare (Eds.), *Structured Programming*, pp. 83–174. Academic Press, Inc. ISBN 0122005503 URL http://research.microsoft.com/~thoare/
- [168] Huang CM, Bi Q, Stiles G and Harris R (1992) Fast Full Search Equivalent Encoding Algorithms for Image Compression Using Vector Quantization. IEEE Transactions on Image Processing 1(3), 413–416 URL http://www1.bell-labs.com/user/qbi/
- [169] Igarashi T, Matsuoka S and Tanaka H (1999) **Teddy: A Sketching Interface for 3D Freeform Design**. In *Proc. 26th Comp. Graph. (SIGGRAPH)*, pp. 409–416. ACM Press/Addison-Wesley Publishing Co. ISBN 0-201-48560-5. *DOI:10.1145/311535. 311602*URL http://www-ui.is.s.u-tokyo.ac.jp/~takeo/papers/siggraph99.pdf
- [170] Intel (2004) **Open Source Computer Vision Library**. Technical report, Intel URL http://www.intel.com/research/mrl/research/opencv/
- [171] Irani S and Raghavan P (1996) Combinatorial and Experimental Results for Randomized Point Matching Algorithms. In Proc. 12th Comp. Geom. (SoCG), pp. 68–77. ACM Press. ISBN 0-89791-804-5. DOI:10.1145/237218.237240 URL http://www.ics.uci.edu/~irani/pubs/pubs.html
- [172] Isenburg M and Gumhold S (2003) Out-of-core Compression for Gigantic Polygon Meshes. ACM Trans Graph (SIGGRAPH) 22(3), 935–942. ISSN 0730-0301. DOI: 10.1145/882262.882366 URL http://www.cs.unc.edu/~isenburg/oocc/
- [173] James DL and Pai DK (2004) BD-Tree: Output-sensitive Collision Detection for Reduced Deformable Models. ACM Trans Graph (TOG) 23(3), 393–398. ISSN 0730-0301. DOI:10.1145/1015706.1015735 URL http://graphics.cs.cmu.edu/projects/bdtree/
- [174] Jensen HW (2001) Realistic Image Synthesis Using Photon Mapping. AK Peters. ISBN 1-56881-147-0 URL http://graphics.ucsd.edu/~henrik/papers/book/
- [175] Johnson M, Ladner R and Riskin E (1992) Fast Nearest Neighbor Search of Entropy-Constrained Vector Quantization. IEEE Transactions on Image Processing 9(8), 1435–1436 URL http://dcl.ee.washington.edu/papers/README.html
- [176] Ju L, Du Q and Gunzburger M (2002) Probabilistic Methods for Centroidal Voronoi Tessellations and Their Parallel Implementations. Parallel Comput 28(10), 1477–1500. ISSN 0167-8191. DOI:10.1016/S0167-8191(02)00151-5 URL http://www.math.psu.edu/ccma/Reports/Publications/Publications2001/ Info_files/AM250.html
- [177] Kajiya JT (1986) The Rendering Equation. In Proc. 13th Comp. Graph. (SIGGRAPH), pp. 143–150. ACM Press. ISBN 0-89791-196-2. DOI:10.1145/15922. 15902 URL http://research.microsoft.com/users/kajiya/

[178] Kalman E Rudolph (1960) A New Approach to Linear Filtering and Prediction Problems. Transactions of the ASME–Journal of Basic Engineering 82(Series D), 35–45

URL http://www.cs.unc.edu/~welch/kalman/

- [179] Kannala J and Brandt S (2004) A Generic Camera Calibration Method for Fisheye Lenses. In International Conference on Pattern Recognition (ICPR), volume 1 URL http://www.lce.hut.fi/~jkannala/Kannala_Brandt_ICPR2004.pdf
- [180] Kanungo T, Mount DM, Netanyahu NS, Piatko CD, Silverman R and Wu AY (2002) A Local Search Approximation Algorithm for k-Means Clustering. In Proc. 18th Comp. Geom. (SoCG), pp. 10–18. ACM Press. ISBN 1-58113-504-1. DOI:10.1145/513400.513402
 URL http://www.cs.umd.edu/~mount/Projects/KMeans/
- [181] Karamcheti V, Li C, Pechtchanski I and Yap C (1999) A Core Library for Robust Numeric and Geometric Computation. In Proc. 15th Comp. Geom. (SoCG), pp. 351–359. ACM Press. ISBN 1-58113-068-6. DOI:10.1145/304893.304989 URL http://cs.nyu.edu/chenli/papers/core.pdf
- [182] Kettner L, Mehlhorn K, Pion S, Schirra S and Yap C (2004) Classroom Examples of Robustness Problems in Geometric Computations. In 12th Europ. Symp. on Algorithms (ESA), volume 3221 of LNCS, pp. 702–713. Springer-Verlag URL http://www.mpi-sb.mpg.de/~kettner/pub/nonrobust_esa_04_a.html
- [183] Knuth DE (1992) **Axioms and Hulls**, volume 606 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin. ISBN 3-540-55611-7 URL http://www-cs-faculty.stanford.edu/~knuth/aah.html
- [184] Knuth DE (1997) **The Art of Computer Programming: Seminumerical Algorithms**, volume 2. Addison-Wesley, 3rd edition. ISBN 0-201-89684-2 URL http://www-cs-faculty.stanford.edu/~knuth/taocp.html
- [185] Kobbelt L (2000) √3-subdivision. In Proc. 27th Comp. Graph. (SIGGRAPH), pp. 103—112. ACM Press/Addison-Wesley. ISBN 1-58113-208-5. DOI:10.1145/344779.344835 URL http://www-i8.informatik.rwth-aachen.de/publications/downloads/sqrt3.pdf
- [186] Kolb C, Mitchell D and Hanrahan P (1995) A Realistic Camera Model for Computer Graphics. In Proc. 22nd Comp. Graph. (SIGGRAPH), pp. 317–324. ACM Press. ISBN 0-89791-701-4. DOI:10.1145/218380.218463 URL http://graphics.stanford.edu/papers/camera/
- [187] Kumar A, Sabharwal Y and Sen S (2004) A Simple Linear Time (1 + ε)-approximation Algorithm for k-Means Clustering in Any Dimensions. In Proc. 45th Foundations of Computer Science (FOCS), pp. 454–462 URL http://www.cse.iitd.ernet.in
- [188] Kwatra V, Schödl A, Essa I, Turk G and Bobick A (2003) Graphcut Textures: Image and Video Synthesis Using Graph Cuts. ACM Trans Graph (TOG) 22(3), 277– 286. ISSN 0730-0301. DOI:10.1145/882262.882264 URL http://www.cc.gatech.edu/cpl/projects/graphcuttextures/

- [189] La Poutré JA (1990) Lower Bounds for the Union-find and the Split-find Problem on Pointer Machines. In Proc. 22nd Sympos. Theory of Computing (STOC), pp. 34–44. ACM Press. ISBN 0-89791-361-2. DOI:10.1145/100216.100221
- [190] Lafortune E (1996) Mathematical Models and Monte Carlo Algorithms for Physically Based Rendering. Ph.D. thesis, Stanford University, Leuven, Belgium URL http://www.graphics.cornell.edu/~eric/thesis/
- [191] Lai SH (2000) Robust Image Matching Under Partial Occlusion and Spatially Varying Illumination Change. Comput Vis Image Underst (CVIU) 78(1), 84–98. ISSN 1077-3142. DOI:10.1006/cviu.1999.0829
 URL http://www.cs.nthu.edu.tw/~lai/
- [192] Lapidous E and Jiao G (1999) **Optimal Depth Buffer for Low-cost Graphics Hardware**. In *Proc. of Workshop on Graphics Hardware (HWWS)*, pp. 67–73. ACM Press, New York, NY, USA. ISBN 1-58113-170-4. DOI:10.1145/311534.311579 URL http://www.graphicshardware.org/previous/www_1999/presentations/d-buffer/
- [193] Lau D and Arce G (2001) Modern Digital Halftoning. Drekker. ISBN 0-8247-0456-8 URL http://www.engr.uky.edu/~dllau/
- [194] Lee DT and Wong CK (1980) Quintary Trees: A File Structure for Multidimensional Database Systems. ACM Trans Database Syst 5(3), 339–353 URL http://www.iis.sinica.edu.tw/~dtlee/
- [195] Lee JC, Dietz PH, Maynes-Aminzade D, Raskar R and Hudson SE (2004) Automatic Projector Calibration with Embedded Light Sensors. In Proc. 17th User Interface Software Technology (UIST), pp. 123–126 URL http://www.merl.com/reports/docs/TR2004-036.pdf
- [196] Lengyel E (2003) Mathematics for 3D Game Programming & Computer Graphics. Charles River Media. ISBN 1584502770 URL http://www.terathon.com/eric/
- [197] Lengyel J and Snyder J (1997) Rendering with Coherent Layers. In Proc. 24th Comp. Graph. (SIGGRAPH), pp. 233-242. ACM Press/Addison-Wesley Publishing Co. ISBN 0-89791-896-7. DOI:10.1145/258734.258856 URL http://research.microsoft.com/research/pubs/view.aspx?pubid=94
- [198] Levoy M (1981) Area Flooding Algorithms. In ACM (Ed.), Two-dimensional Computer Animation, (Course Note #9, SIGGRAPH)

 URL http://graphics.stanford.edu/~levoy/sands_award.html
- [199] Levoy M and Hanrahan P (1996) Light Field Rendering. In Proc. 23rd Comp. Graph. (SIGGRAPH), pp. 31–42. ACM Press. ISBN 0-89791-746-4. DOI:10.1145/ 237170.237199 URL http://graphics.stanford.edu/papers/light/
- [200] Lieberman H (1978) **How to Color in a Coloring Book**. In *Proc. 5th Comp. Graph.* (SIGGRAPH), pp. 111–116. ACM Press. DOI:10.1145/800248.807380

[201] Lin S, Zhang Q and Shi J (2005) Alpha Estimation in Perceptual Color Space. In Proc. IEEE Acoustics, Speech, and Signal Processing (ICASSP) URL http://www.cad.zju.edu.cn/home/lsy/

- [202] Lindeberg T (1994) Scalespace Theory in Computer Vision. Kluwer Academic Publishers. ISBN 0792394186 URL http://www.nada.kth.se/~tony/
- [203] Lindstrom P (2000) Out-of-core Simplification of Large Polygonal Models. In Proc. 27th Comp. Graph. (SIGGRAPH), pp. 259–262. ACM Press/Addison-Wesley. ISBN 1-58113-208-5. DOI:10.1145/344779.344912

 URL http://www.gvu.gatech.edu/people/peter.lindstrom/papers/siggraph2000/
- [204] Lindstrom P (2003) Out-of-core Construction and Visualization of Multiresolution Surfaces. In Symp. on Interactive 3D Graphics (SI3D), pp. 93–102. DOI: 10.1145/641480.641500 URL http://www.gvu.gatech.edu/people/peter.lindstrom/papers/i3d2003/
- [205] Liotta G, Preparata FP and Tamassia R (1999) Robust Proximity Queries: An Illustration of Degree-driven Algorithm Design. SIAM J Comput 28(3), 864–889. ISSN 0097-5397. DOI:10.1137/S0097539796305365
 URL http://www.cs.brown.edu/publications/techreports/reports/CS-96-16.html
- [206] Lloyd S (1957) Least Squares Quantization in PCM. Technical report, Bell Laboratories Technical Note
- [207] Lorensen WE and Cline HE (1987) Marching Cubes: A High Resolution 3D Surface Construction Algorithm. In Proc. 14th Comp. Graph. (SIGGRAPH), pp. 163–169. ACM Press. ISBN 0-89791-227-6. DOI:10.1145/37401.37422 URL http://www.crd.ge.com/~lorensen/
- [208] Losasso F and Hoppe H (2004) Geometry Clipmaps: Terrain Rendering Using Nested Regular Grids. Proc 31st Comp Graph (SIGGRAPH) 23(3), 769–776. ISSN 0730-0301. DOI:10.1145/1015706.1015799 URL http://research.microsoft.com/~hoppe/geomclipmap.pdf
- [209] Losasso F, Hoppe H, Schaefer S and Warren J (2003) Smooth Geometry Images. In Proc. Eurographics/ACM SIGGRAPH Symp. Geometry Processing (SGP), pp. 138–145. Eurographics Association. ISBN 1-58113-687-0 URL research.microsoft.com/~hoppe/sgim.pdf
- [210] Low KL and Tan TS (1997) Model Simplification Using Vertex-clustering. In Proc. Sympos. Interactive 3D Graph. (I3D), pp. 75–82. ACM Press. ISBN 0-89791-884-3. DOI:10.1145/253284.253310
 URL http://www.comp.nus.edu.sg/~tants/Paper/simplify.pdf
- [211] Lowe DG (1999) Object Recognition from Local Scale-invariant Features. In Proc. 7th International Conference on Computer Vision (ICCV), volume 2, p. 1150. IEEE CS Press. ISBN 0-7695-0164-8 URL http://www.cs.ubc.ca/spider/lowe/papers/iccv99.pdf

- [212] Lowe DG (2004) **Distinctive Image Features from Scale-invariant Keypoints**. Int J Comput Vision (IJCV) **60**(2), 91–110. ISSN 0920-5691. DOI:10.1023/B:VISI. 0000029664.99615.94 URL http://www.cs.ubc.ca/~lowe/papers/ijcv04.pdf
- [213] Lucas BD and Kanade T (1981) An Iterative Image Registration Technique with an Application to Stereo Vision. In Proc. 7th Joint Conference on Artificial Intelligence (IJCAI), pp. 674–679. Vancouver, Canada URL http://www.ri.cmu.edu/pubs/pub_2549.html
- [214] Luebke D, Watson B, Cohen JD, Reddy M and Varshney A (2002) Level of Detail for 3D Graphics. Elsevier Science. ISBN 1558608389 URL http://lodbook.com/
- [215] Lueker GS (1978) A Data Structure for Orthogonal Range Queries. In Proc. 19th Foundations of Computer Science (FOCS), pp. 28–34 URL http://www.ics.uci.edu/~lueker/
- [216] Luong Q and Faugeras OD (1996) **The Fundamental Matrix: Theory, Algorithms,** and **Stability Analysis**. Int J Comput Vision (IJCV) **17**(1), 43–75 URL http://www.ai.sri.com/~luong/
- [217] Marinov M and Kobbelt L (2004) **Direct Anisotropic Quad-dominant Remeshing**. In Pacific Conference on Computer Graphics and Applications (PG), pp. 207–216 URL http://www-i8.informatik.rwth-aachen.de/publications/downloads/aniso.pdf
- [218] Marr D (1982) Vision: A Computational Investigation into the Human Representation and Processing of Visual Information. W. H. Freeman and Company, San Francisco, CA, USA URL http://en.wikipedia.org/wiki/David_Marr
- [219] Massey WS (1967) Algebraic Topology: An Introduction. Number 56 in Graduate Texts in Mathematics. Springer-Verlag, New York, NY. ISBN 0387902716
- [220] Matoušek J, Sharir M and Welzl E (1996) A Subexponential Bound for Linear Programming. Algorithmica 16(4/5), 498–516 URL http://www.inf.fu-berlin.de/inst/pubs/tr-b-92-17.abstract.html
- [221] McCarthy JM (1990) Introduction to Theoretical Kinematics. MIT Press. ISBN 0-262-13252-4 URL http://synthetica.eng.uci.edu:16080/~mccarthy/
- [222] McMillan L and Bishop G (1995) Plenoptic Modeling: An Image-based Rendering System. In Proc. 22nd Comp. Graph. (SIGGRAPH), pp. 39–46. ACM Press. ISBN 0-89791-701-4. DOI:10.1145/218380.218398 URL http://www.cs.brown.edu/stc/resea/rendering/research_R8.html
- [223] Mehlhorn K, Müller M, Näher S, Schirra S, Seel M, Uhrig C and Ziegler J (1998) A Computational Basis for Higher-dimensional Computational Geometry and Applications. Comput Geom 10(4), 289–303
 URL http://domino.mpi-sb.mpg.de/internet/reports.nsf/0/8705d9d63b2be2cec12563310047d21c?OpenDocument

[224] Mehlhorn K and Näher S (1999) **LEDA: A Platform for Combinatorial and Geometric Computing**. Cambridge University Press. ISBN 0-521-56329-1 URL http://www.mpi-sb.mpg.de/~mehlhorn/LEDAbook.html

- [225] Mehlhorn K, Näher S, Seel M, Seidel R, Schilz T, Schirra S and Uhrig C (1999) Checking Geometric Programs or Verification of Geometric Structures. Comput Geom 12(1-2), 85–103
 URL http://www.algorithmic-solutions.com/downloads.htm
- [226] Mehta D and Sahni S (Eds.) (2004) **Handbook on Data Structures and Applications**. CRC Press. ISBN 1584884355 URL http://www.mines.edu/~dmehta/
- [227] Meijster A and Wilkinson MHF (2002) A Comparison of Algorithms for Connected Set Openings and Closings. IEEE Trans Pattern Anal Mach Intell (TPAMI) 24(4), 484–494. ISSN 0162-8828. DOI:10.1109/34.993556
 URL http://www.ruq.nl/rc/hpcv/people/arnold/index
- [228] Melax S (1998) A Simple, Fast, and Effective Polygon Reduction Algorithm. Game Developer Magazine pp. 44–49 URL http://www.melax.com/polychop/gdmag.pdf
- [229] Miller GS and Hoffman CR (1984) Illumination and Reflection Maps: Simulated Objects in Simulated and Real Environments. Course Notes, SIGGRAPH URL http://www.debevec.org/ReflectionMapping/illumap.pdf
- [230] Min P, Halderman JA, Kazhdan M and Funkhouser TA (2003) **Early Experiences** with a 3D Model Search Engine. In Proc. 8th Int. Conf. 3D Web Technology (Web3D), pp. 7–18. ACM Press. ISBN 1-58113-644-7. DOI:10.1145/636593.636595 URL http://www.cs.princeton.edu/~min/mc/min_web3d_2003.pdf
- [231] Minsky M and Papert S (1969) **Perceptrons: An Introduction to Computational Geometry**. MIT Press. ISBN 0262130432 URL http://web.media.mit.edu/~minsky/
- [232] Möller T and Trumbore B (1997) Fast, Minimum Storage Ray-triangle Intersection. J Graph Tools (JGT) 2(1), 21–28. ISSN 1086-7651 URL http://www.acm.org/jgt/papers/MollerTrumbore97/
- [233] Motwani R and Raghavan P (1995) Randomized Algorithms. Cambridge University Press. ISBN 0-521-47465-5 URL http://theory.stanford.edu/~rajeev/
- [234] Mount DM, Netanyahu NS, Romanik K, Silverman R and Wu AY (1997) A Practical Approximation Algorithm for the LMS Line Estimator. In Proc. 8th ACM-SIAM Discrete Algorithms (SODA), pp. 473–482. Society for Industrial and Applied Mathematics. ISBN 0-89871-390-0 URL http://www.cs.umd.edu/~mount/Papers/ALMS.ps
- [235] Muerle T and Allen D (1968) Experimental Evaluation of Techniques for Automatic Segmentation of Objects in a Complex Scene. Pictorial Pattern Recognition pp. 3–13

- [236] Mulmuley K (1994) Computational Geometry: An Introduction Through Randomized Algorithms. Prentice-Hall. ISBN 0-13-336363-5 URL http://www.cse.iitb.ac.in/~ketan/
- [237] Mundy JL and Zisserman A (1992) Appendix—Projective Geometry for Machine Vision. In Geometric Invariance in Computer Vision, pp. 463–519. MIT Press. ISBN 0-262-13285-0 URL http://www.enqin.brown.edu/faculty/Mundy/
- [238] Munkres J (1975) Topology: A First Course. Prentice-Hall, Englewood Cliffs, NJ. ISBN 0139254951 URL http://math.mit.edu/people/faculty/munkres.html
- [239] Munkres JR (1984) Elements of Algebraic Topology. Addison-Wesley. ISBN 0201627280 URL http://math.mit.edu/people/faculty/munkres.html
- [240] Munro JI, Papadakis T and Sedgewick R (1992) **Deterministic Skip Lists**. In *Proc.* 3rd ACM-SIAM Discrete Algorithms (SODA), pp. 367–375. SIAM Press. ISBN 0-89791-466-X URL http://db.uwaterloo.ca/~imunro/
- [241] Muthukrishnan S (2003) **Data Streams: Algorithms and Applications**. In *Proc.* 14th Sympos. on Discrete Algorithms (SODA), pp. 413–413. Society for Industrial and Applied Mathematics, Philadelphia, PA, USA. ISBN 0-89871-538-5 URL http://athos.rutgers.edu/~muthu/stream-1-1.ps
- [242] Myers N (1996) A New and Useful Template Technique: Traits pp. 451–457 URL http://www.cantrip.org/traits.html
- [243] Naylor B, Amanatides J and Thibault W (1990) Merging BSP Trees Yields Polyhedral Set Operations. In Proc. 17th Comp. Graph. (SIGGRAPH), pp. 115–124. ACM Press. ISBN 0-201-50933-4. DOI:10.1145/97879.97892 URL http://www.cs.yorku.ca/~amana/research/bsptSetOp.pdf
- [244] Nielsen F (1998) Grouping and Querying: A Paradigm to Get Output-sensitive Algorithms. In Japan Conf. Discrete & Comp. Geom. (JCDCG), pp. 250–257 URL http://www.csl.sony.co.jp/person/nielsen/
- [245] Nielsen F (2000) Adaptive Randomized Algorithms for Mosaicing Systems. IEICE Transactions of the Institute of Electronics, Information, and Communication Engineers, Information and Systems E83-D(7), 1386–1394 URL http://www.csl.sony.co.jp/person/nielsen
- [246] Nielsen F (2005) Surround Video: A Multihead Camera Approach. The Visual Computer 21(1-2), 92-103. DOI:10.1007/s00371-004-0273-z
 URL http://www.csl.sony.co.jp/person/nielsen/
- [247] Nielsen F and Nock R (2003) On Region Merging: The Statistical Soundness of Fast Sorting, with Applications. In Proc. IEEE Computer Vision and Pattern Recognition (CVPR), volume 2, pp. 19–26. IEEE Computer Society, Los Alamitos, CA URL http://www.csl.sony.co.jp/person/nielsen/

[248] Nielsen F and Nock R (2004) **Approximating Smallest Enclosing Balls**. In *Int. Conf. on Computational Science and Its Applications (ICCSA)*, volume 3 of *LNCS*, pp. 147–157. Springer-Verlag URL http://www.csl.sony.co.jp/person/nielsen

- [249] Nirenstein S, Blake E and Gain J (2002) **Exact From-region Visibility Culling**. In *Proc. 13th Eurographics Workshop on Rendering (EWGR)*, pp. 191–202. Eurographics Association. ISBN 1-58113-534-3

 URL http://people.cs.uct.ac.za/~snirenst/nirenstein_se_1.pdf
- [250] Nock R and Nielsen F (2004) An Abstract Weighting Framework for Clustering Algorithms. In DS C Kamath (Ed.), SIAM Data Mining (SDM), pp. 200–209. SIAM Press URL http://www.siam.org/meetings/sdm04/proceedings/
- [251] Nock R and Nielsen F (2005) Semisupervised Statistical Region Refinement for Color Image Segmentation. Pattern Recognition 38(6), 835–846. DOI:10.1016/j. patcog.2004.11.009

 URL http://www.univ-ag.fr/~rnock/
- [252] Orchard MT (1991) A Fast Nearest Neighbor Search Algorithm. In Proc. Int. Conf. on Acoustics, Speech, and Signal Processing (ICASSP), pp. 2297–2300 URL http://www-ece.rice.edu/ece/faculty/Orchard.html
- [253] O'Rourke J (1998) Computational Geometry in C. Cambridge University Press. ISBN 0521640105 URL http://maven.smith.edu/~orourke/books/compgeom.html
- [254] O'Rourke J (2003) Computer Graphics FAQ. Internet URL http://www.faqs.org/faqs/graphics/algorithms-faq/
- [255] Osher S and Rudin LI (1990) Feature-oriented Image Enhancement Using Shock Filters. SIAM J Numer Anal 27(4), 919–940. DOI:10.1137/0727053 URL http://www.math.ucla.edu/~sjo/
- [256] Ostromoukhov V, Donohue C and Jodoin PM (2004) Fast Hierarchical Importance Sampling with Blue Noise Properties. ACM Trans Graph (TOG) 23(3), 488–495 URL http://www.iro.umontreal.ca/~ostrom/ImportanceSampling/
- [257] Owada S, Nielsen F, Nakazawa K and Igarashi T (2003) A Sketching Interface for Modeling the Internal Structures of 3D Shapes. In Smart Graphics, pp. 49–57 URL http://www-ui.is.s.u-tokyo.ac.jp/~takeo/papers/owada-smartgraphics2003.pdf
- [258] Owada S, Nielsen F, Okabe M and Igarashi T (2004) Volumetric Illustration: Designing 3D Models with Internal Textures. ACM Trans Graph (TOG) 23(3), 322–328. ISSN 0730-0301. DOI:10.1145/1015706.1015723
 URL http://www-ui.is.s.u-tokyo.ac.jp/~o/VolumetricIllustration/
- [259] P754 IT (1985) ANSI/IEEE 754-1985, Standard for Binary Floating-point Arithmetic. IEEE, New York. A preliminary draft was published in the January 1980 issue of IEEE Computer, together with several companion articles. Available from

- the IEEE Service Center, Piscataway, NJ, USA. URL http://grouper.ieee.org/groups/754/
- [260] Paterson MS and Yao FF (1990) Efficient Binary Space Partitions for Hidden-Surface Removal and Solid Modeling. Discrete and Computational Geometry (DCG) 5, 485–503
 URL http://www.dcs.warwick.ac.uk/people/academic/Mike.Paterson/
- [261] Pfister H and Gross MH (2004) **Point-based Computer Graphics**. IEEE Computer Graphics and Applications (CGA) **24**(4), 22–23 URL http://www.merl.com/people/pfister/
- [262] Pharr M and Humphreys G (2004) Physically Based Rendering: From Theory to Implementation. Morgan Kaufmann Publishers Inc., San Francisco, CA, USA. ISBN 012553180X URL http://pbrt.org/
- [263] Pinhanez C, Nielsen F and Binsted K (1999) Projecting Computer Graphics on Moving Surfaces: A Simple Calibration and Tracking Method. In Proc. 26th Comp. Graph. Conf. Abstracts & Applications (SIGGRAPH), p. 266. ACM Press, New York, NY, USA. ISBN 1-58113-103-8. DOI:10.1145/311625.312166 URL http://www.csl.sony.co.jp/person/nielsen/PT/hypermask/hypermask.html
- [264] Pless R (2003) Using Many Cameras as One. In Proc. Conf. Computer Vision and Pattern Recognition (CVPR), pp. 587–593. IEEE Press URL http://www.cs.wustl.edu/~pless/papers/plessPlucker.pdf
- [265] Ponce J, McHenry K, Papadopoulo T, Teillaud M and Triggs B (2005) On the Absolute Quadratic Complex and its Application to Autocalibration. In Proc. IEEE Computer Vision and Pattern Recognition (CVPR) URL http://www-cvr.ai.uiuc.edu/ponce_grp/publication/paper/cvpr05a.pdf
- [266] Porter T and Duff T (1984) Compositing Digital Images. In *Proc. 11th Comp. Graph.* (SIGGRAPH), pp. 253–259. ACM Press. ISBN 0-89791-138-5 URL http://keithp.com/~keithp/porterduff/
- [267] Pottmann H and Wallner J (2001) Computational Line Geometry. Mathematics and Visualization. Springer. ISBN 3-540-42058-4 URL http://www.geometrie.tuwien.ac.at/pottmann/
- [268] Poynton C and Johnson GM (2004) Color Science and Color Appearance Models for CG, HDTV, and D-Cinema. Course Notes #2, SIGGRAPH URL http://www.poynton.com/
- [269] Praun E and Hoppe H (2003) Spherical Parametrization and Remeshing. ACM Trans Graph (TOG) 22(3), 340–349. ISSN 0730-0301. DOI:10.1145/882262.882274 URL http://research.microsoft.com/~hoppe/sphereparam.pdf
- [270] Preparata FP and Hong SJ (1977) Convex Hulls of Finite Sets of Points in Two and Three Dimensions. Commun ACM (CACM) 20(2), 87–93. ISSN 0001-0782. DOI:10.1145/359423.359430 URL http://www.cs.brown.edu/people/franco/

[271] Preparata FP and Shamos MI (1985) Computational Geometry: An Introduction. Springer-Verlag. ISBN 0-387-96131-3
URL http://www.cs.brown.edu/people/franco/

- [272] Press WH, Flannery BP, Teukolsky SA and Vetterling WT (1988) Numerical Recipes in C: the Art of Scientific Computing. Cambridge University Press. ISBN 0-521-35465-X URL http://www.nr.com/
- [273] Pugh W (1989) Skip Lists: A Probabilistic Alternative to Balanced Trees. In Workshop on Algorithms and Data Structures (WADS), pp. 437–449 URL http://www.cs.umd.edu/~pugh/
- [274] Pugh W (1990) Skip Lists: A Probabilistic Alternative to Balanced Trees. Commun ACM (CACM) **33**(6), 668–676. ISSN 0001-0782. DOI:10.1145/78973.78977 URL http://www.cs.umd.edu/~pugh/
- [275] Rademacher P and Bishop G (1998) Multiple-center-of-projection Images. In Proc. 25th Comp. Graph. (SIGGRAPH), pp. 199–206. ACM Press. ISBN 0-89791-999-8. DOI: 10.1145/280814.280871 URL http://www.cs.unc.edu/~rademach/mcop98.html
- [276] Raskar R and Beardsley PA (2001) A Self-correcting Projector. In Proc. IEEE Computer Vision and Pattern Recognition (CVPR), volume 2, pp. 504–508. DOI:10. 1109/CVPR.2001.991004 URL http://www.merl.com/reports/docs/TR2001-46.pdf
- [277] Ravikumar P and Lafferty J (2004) Variational Chernoff Bounds for Graphical Models. In Proc. 20th Uncertainty in Artificial Intelligence (UAI), pp. 462–469. AUAI Press. ISBN 0-9749039-0-6
 URL http://www-2.cs.cmu.edu/~lafferty/ps/bounds.pdf
- [278] Reinhard E, Pattanaik SN, Ward G and Debevec PE (2005) **High-dynamic Range Imaging**. Morgan Kaufmann URL http://www.cs.ucf.edu/~reinhard/
- [279] Reitsma R, Trubin S and Sethia S (2004) Information Space Regionalization Using Adaptive Multiplicatively Weighted Voronoi Diagrams. In Proc. 8th Information Visualisation (IV), pp. 290–294
 URL http://web.engr.oregonstate.edu/~saurabh/research/info-vis.pdf
- [280] Rekimoto J and Ayatsuka Y (2000) CyberCode: Designing Augmented Reality Environments with Visual Tags. In Proc. Designing Augmented Reality Environments (DARE), pp. 1–10. ACM Press. DOI:10.1145/354666.354667 URL http://www.csl.sony.co.jp/person/rekimoto/papers/dare2000.pdf
- [281] Rekimoto J and Nagao K (1995) The World Through the Computer: Computer Augmented Interaction with Realworld Environments. In Proc. 8th User Interface & Software Technology (UIST), pp. 29–36. ACM Press. ISBN 0-89791-709-X. DOI:10.1145/215585.215639

 URL http://www.csl.sony.co.jp/person/rekimoto/navi.html

- [282] Reuter P, Behr J and Alexa M (2005) An Improved Adjacency Data Structure for Fast Triangle Stripping. Journal of Graphics Tools (JGT) URL http://www.labri.fr/Perso/~preuter/fstrip/
- [283] Rosenfeld A (1969) Picture Processing by Computer. Academic Press
- [284] Rossignac JR and Borrel P (1993) Multiresolution 3D Approximations for Rendering Complex Scenes. In B Falcidieno and TL Kunii (Eds.), Geometric Modeling in Computer Graphics, pp. 455–465. Springer-Verlag, Genova, Italy. ISBN 0-387-56529-9
 URL http://www.gvu.gatech.edu/~jarek/
- [285] Ruderman D, Cronin T and Chiao C (1998) Statistics of Cone Responses to Natural Images: Implications for Visual Coding. Journal of the Optical Society of America (JOSA) 15(8) URL http://www.umbc.edu/biosci/Faculty/cronin.html
- [286] Salesin D, Stolfi J and Guibas L (1989) Epsilon Geometry: Building Robust Algorithms from Imprecise Computations. In Proc. 5th Comp. Geom. (SoCG), pp. 208–217. ACM Press. ISBN 0-89791-318-3. DOI:10.1145/73833.73857 URL http://salesin.cs.washington.edu/
- [287] Schapire RE (1999) A Brief Introduction to Boosting. In Proc. 6th International Joint Conference on Artificial Intelligence (IJCAI), pp. 1401–1406 URL http://www.boosting.org
- [288] Schroeder WJ, Zarge JA and Lorensen WE (1992) **Decimation of Triangle Meshes**. In *Proc. 19th Comp. Graph. (SIGGRAPH)*, pp. 65–70. ACM Press. ISBN 0-89791-479-1. *DOI:10.1145/133994.134010*URL http://www.crd.ge.com/~lorensen/decimate/decimate.html
- [289] Sederberg TW and Parry SR (1986) Free-form Deformation of Solid Geometric Models. In Proc. 13th Comp. Graph. (SIGGRAPH), pp. 151–160. ACM Press. ISBN 0-89791-196-2. DOI:10.1145/15922.15903
- [290] Sedgewick R (1978) Implementing Quicksort Programs. Commun ACM (CACM) 21(10), 847–857. ISSN 0001-0782. DOI:10.1145/359619.359631 URL http://www.cs.princeton.edu/~rs/
- [291] Sedgewick R and Flajolet P (1996) An Introduction to the Analysis of Algorithms. Addison-Wesley. ISBN 0-201-40009-X. 512 pages URL http://algo.inria.fr/flajolet/Publications/books.html
- [292] Seidel R (1991) Backwards Analysis of Randomized Geometric Algorithms. Technical Report TR-92-014, ICSI, Århus, Denmark URL http://www.icsi.berkeley.edu/techreports/1992.abstracts/tr-92-014.html
- [293] Seidel R and Aragon CR (1996) **Randomized Search Trees**. Algorithmica **16**(4/5), 464–497 URL http://www.sims.berkeley.edu/~aragon/pubs/rst89.pdf

[294] Seitz S (1997). **Bringing Photographs to Life with View Morphing**. Proc. Imagina URL http://www.ri.cmu.edu/pubs/pub_2846.html

- [295] Seitz SM and Dyer CR (1996) View Morphing. In Proc. 23rd Comp. Graph. (SIGGRAPH), pp. 21–30. ACM Press. ISBN 0-89791-746-4. DOI:10.1145/237170. 237196

 URL http://www.cs.washinqton.edu/homes/seitz/vmorph/vmorph.htm
- [296] Seitz SM and Kim J (2002) The Space of All Stereo Images. Int J Comput Vision (IJCV) 48(1), 21–38. ISSN 0920-5691. DOI:10.1023/A:1014851111084 URL http://grail.cs.washington.edu/projects/stereo/
- [297] Shade J, Gortler S, wei He L and Szeliski R (1998) Layered Depth Images. In Proc. 25th Comp. Graph. (SIGGRAPH), pp. 231–242. ACM Press. ISBN 0-89791-999-8. DOI:10.1145/280814.280882 URL http://grail.cs.washington.edu/projects/ldi/
- [298] Shafae M and Pajarola R (2003) **DSTRIPS: Dynamic Triangle Strips for Real**time Mesh Simplification and Rendering. In J Rokne, W Wang and R Klein (Eds.), *Proc. Pacific Graphics (PG)*, pp. 271–280. IEEE Press URL http://www.ics.uci.edu/~pajarola/pub/DStrips.pdf
- [299] Shamos MI and Hoey D (1975) Closest-point Problems. In Proc. 16th Foundations of Computer Science (FOCS), pp. 151–162
- [300] Shamos MI and Hoey D (1976) **Geometric Intersection Problems**. In *Proc. 17th Foundations of Computer Science (FOCS)*, pp. 208–215
- [301] Shannon CE (1948) A Mathematical Theory of Communication. The Bell System technical journal 27, 379–423 URL http://cm.bell-labs.com/cm/ms/what/shannonday/paper.html
- [302] Sharir M and Agarwal PK (1996) **Davenport-Schinzel Sequences and Their Geometric Applications**. Cambridge University Press. ISBN 0-521-47025-0 URL http://www.math.tau.ac.il/~michas/
- [303] Shewchuk JR (1997) Adaptive Precision Floating-point Arithmetic and Fast Robust Geometric Predicates. Discrete & Computational Geometry (DCG) 18(3), 305–368

 URL http://www-2.cs.cmu.edu/~quake/robust.html
- [304] Shi J and Tomasi C (1994) **Good Features to Track**. In Conference on Computer Vision and Pattern Recognition (CVPR). IEEE CS Press URL http://www.ri.cmu.edu/pubs/pub_3266.html
- [305] Shoemake K (1985) **Animating Rotation with Quaternion Curves**. In *Proc. 12th Comp. Graph. (SIGGRAPH)*, pp. 245–254. ACM Press. ISBN 0-89791-166-0. *DOI:* 10.1145/325334.325242
- [306] Shoemake K (1987) Quaternion Calculus and Fast Animation. In Course notes #10, ACM SIGGRAPH

- [307] Shoemake K (1992) ARCBALL: A User Interface for Specifying Three-dimensional Orientation Using a Mouse. In Proc. 21st Comp. Graph. (SIGGRAPH), pp. 151–156. Morgan Kaufmann. ISBN 0-9695338-1-0
- [308] Shoemake K (1994) Arcball Rotation Control. pp. 175–192. Academic Press. ISBN 0-12-336155-9 URL http://www.acm.org/pubs/tog/GraphicsGems/gemsiv/arcball/
- [309] Siek J, Lee LQ and Lumsdaine A (2002) The Boost Graph Library: User Guide and Reference Manual. Addison-Wesley. ISBN 0-201-72914-8 URL http://www.boost.org/
- [310] Silvela J and Portillo J (2001) Breadth-first Search and its Application to Image Processing Problems. IEEE Trans Im Proc 10(8), 1194–1199 URL http://silvela.org/jaime/BFSpaper.pdf
- [311] Simoncelli EP and Freeman WT (1995) **The Steerable Pyramid: A Flexible Architecture for Multiscale Derivative Computation**. In *Proc. Image Processing (ICIP)*, volume 3, p. 3444. IEEE Computer Society. ISBN 0-8186-7310-9 URL http://www.cns.nyu.edu/~eero/steerpyr/
- [312] Singh K (2002) A Fresh Perspective. In Proc. Graphics Interface (GI), pp. 17–24 URL http://www.graphicsinterface.org/
- [313] Skiena S (1991) Implementing Discrete Mathematics: Combinatorics and Graph Theory with Mathematica[®]. Addison-Wesley. ISBN 0-201-50943-1 URL http://www.cs.sunysb.edu/~skiena/
- [314] Smith AR (1979) Tint Fill. In Proc. 6th Comp. Graph. (SIGGRAPH), pp. 276–283. ACM Press. ISBN 0-89791-004-4 URL http://alvyray.com/
- [315] Smith AR (2001) **Digital Paint Systems: An Anecdotal and Historical Overview**. IEEE Annals of the History of Computing **23**(02), 4–30 URL http://alvyray.com/
- [316] Stewart CV (1999) Robust Parameter Estimation in Computer Vision. SIAM Rev 41(3), 513–537. ISSN 0036-1445
- [317] Stewart D (1966) A Platform With Six Degrees of Freedom. In *Proceedings of The Institution of Mechanical Engineer*, volume 180 Part 1, pp. 371–386. Institution of Mechanical Engineers, UK, The Institution of Mechanical Engineers, UK, IMechE Headquarters, London, England
- [318] Stolfi J (1991) **Oriented Projective Geometry**. Academic Press. ISBN 0-12-672025-8

 URL http://www.dcc.unicamp.br/~stolfi/
- [319] Stroustrup B (1997) **The C++ Programming Language**. Addison-Wesley, 3rd edition. ISBN 0201889544 URL http://www.research.att.com/~bs/C++.html

[320] Su P and Drysdale RLS (1997) A Comparison of Sequential Delaunay Triangulation Algorithms. Comput Geom Theory Appl (CGTA) 7(5-6), 361–385. ISSN 0925-7721. DOI:10.1016/S0925-7721(96)00025-9 URL http://www.cs.dartmouth.edu/~scot/

- [321] Sugihara K and Iri M (1992) Construction of the Voronoi Diagram for 'One Million' Generators in Single-precision Arithmetic. Proc IEEE 80(9), 1471–1484

 URL http://www.simplex.t.u-tokyo.ac.jp/~sugihara/
- [322] Sun J, Jia J, Tang CK and Shum HY (2004) **Poisson Matting**. Proc 31st Comp Graph (SIGGRAPH) **23**(3), 315–321. ISSN 0730-0301. DOI:10.1145/1015706.1015721 URL http://www.cse.cuhk.edu.hk/~leojia/all_final_papers/matting_siggraph04.pdf
- [323] Swaminathan R, Grossberg MD and Nayar SK (2003) A Perspective on Distortions. In Proc. Computer Vision and Pattern Recognition (CVPR), pp. 594–601. IEEE CS Press
 URL http://www1.cs.columbia.edu/CAVE/publinks/swaminathan_CVPR_2003.pdf
- [324] Szeliski R and Shum HY (1997) Creating Full View Panoramic Image Mosaics and Environment Maps. In Proc. 24th Comp. Graph. (SIGGRAPH), pp. 251–258. ACM Press/Addison-Wesley Publishing Co., New York, NY, USA. ISBN 0-89791-896-7. DOI:10.1145/258734.258861 URL http://research.microsoft.com/~szeliski/publications.htm
- [325] Tarjan RE (1975) Efficiency of a Good but Not Linear Set Union Algorithm. J ACM (JACM) 22(2), 215–225. ISSN 0004-5411. DOI:10.1145/321879.321884 URL http://www.cs.princeton.edu/~ret/
- [326] Tarjan RE (1979) A Class of Algorithms which Require Nonlinear Time to Maintain Disjoint Sets. J Computer & Systems Sciences (JCSS) 18(2), 110–127 URL http://www.cs.princeton.edu/~ret/
- [327] Tarjan RE and van Leeuwen J (1984) Worst-case Analysis of Set Union Algorithms. J ACM (JACM) 31(2), 245–281. ISSN 0004-5411. DOI:10.1145/62.2160 URL http://www.cs.princeton.edu/~ret/
- [328] Tomasi C and Manduchi R (1998) **Bilateral Filtering for Gray and Color Images**. In *Proc. 6th International Conference on Computer Vision (ICCV)*, p. 839. IEEE Computer Society. ISBN 81-7319-221-9
 URL http://www.cse.ucsc.edu/~manduchi/Papers/ICCV98.pdf
- [329] Tsai RY (1992) A Versatile Camera Calibration Technique for High-accuracy 3D Machine Vision Metrology Using Off-the-Shelf TV Cameras and Lenses. Radiometry pp. 221–244 URL http://www.research.ibm.com/dar/rt-page.html
- [330] Tu X and Terzopoulos D (1994) Artificial Fishes: Physics, Locomotion, Perception, Behavior. In Proc. 21st Comp. Graph. (SIGGRAPH), pp. 43–50 URL http://www.dgp.toronto.edu/people/tu/papers/sig94.ps

- [331] Varshney A (1994) **Hierarchical Geometric Approximations**. Ph.D. thesis, University of North Carolina at Chapel Hill URL http://www.cs.umd.edu/~varshney/
- [332] Veach E (1998) Robust Monte Carlo Methods for Light Transport Simulation. Ph.D. thesis, Stanford University URL http://graphics.stanford.edu/papers/veach_thesis/
- [333] Veksler O (2003) **Fast Variable Window for Stereo Correspondence using Integral Images**. In *Proc. IEEE Computer Vision and Pattern Recognition (CVPR)*, pp. 556–564
 URL http://www.csd.uwo.ca/faculty/olqa/Papers/cvpr03-a.pdf
- [334] Volder JE (1959) **The CORDIC Trigonometric Computing Technique**. IRE Transactions on Electronic Computers **EC-8**(5), 330–334. ISSN 0367-9950
- [335] Wang Y, Gu X, Chan TF, Thompson PM and Yau ST (2004) Intrinsic Brain Surface Conformal Mapping Using a Variational Method. In SYE Proc SPIE/ Eds William F Walker (Ed.), Medical Imaging: Image Processing, volume 5370, pp. 241–252. The International Society for Optical Engineering. DOI:10.1117/12.534480 URL http://www.cs.sunysb.edu/~gu/papers/miccai.pdf
- [336] Watt A (1993) **3D Computer Graphics**. Addison-Wesley. ISBN 0201631865 URL http://www.shef.ac.uk/dcs/research/graphics
- [337] Watt A and Watt M (1991) Advanced Animation and Rendering Techniques. Addison-Wesley Professional. ISBN 0-201-54412-1 URL http://www.shef.ac.uk/dcs/research/graphics
- [338] Wei LY (2003) **Texture Synthesis from Multiple Sources**. In SIGGRAPH Sketches & Applications. ACM Press. DOI:10.1145/965400.965507

 URL http://graphics.stanford.edu/papers/texture-synthesis-sketch-sig03/
- [339] Wei LY and Levoy M (2000) Fast Texture Synthesis Using Tree-structured Vector Quantization. In Proc. 27th Comp. Graph. (SIGGRAPH), pp. 479–488. ACM Press/Addison-Wesley. ISBN 1-58113-208-5. DOI:10.1145/344779.345009 URL http://graphics.stanford.edu/papers/texture-synthesis-sig00/
- [340] Wei LY and Levoy M (2001) **Texture Synthesis Over Arbitrary Manifold Surfaces**. In *Proc. 28th Comp. Graph. (SIGGRAPH)*, pp. 355–360. ACM Press. ISBN 1-58113-374-X. *DOI:10.1145/383259.383298*URL http://graphics.stanford.edu/papers/texture-synthesis-sig01/
- [341] Weiler K (1988) The Radial-edge Structure: A Topological Representation for Nonmanifold Geometric Boundary Representations. Geometric Modelling for CAD Applications pp. 3–36
- [342] Weiss MA (2001) **Data Structures and Problem Solving Using Java**[™]. Addison-Wesley Longman Publishing Co., Inc., Boston, MA, USA. ISBN 0201748355 URL http://www.cs.fiu.edu/~weiss/

[343] Welzl E (1991) Smallest Enclosing Disks (Balls and Ellipsoids). In H Maurer (Ed.), New Results and New Trends in Computer Science, LNCS. Springer URL http://www.inf.ethz.ch/personal/emo/

- [344] Wiernik A and Sharir M (1988) Planar Realization of Nonlinear Davenport-Schinzel Sequences By Segments. Discrete Computational Geometry (DCG) 3, 15–47
- [345] Williams L (1983) **Pyramidal Parametrics**. In *Proc. 10th Comp. Graph.* (SIGGRAPH), pp. 1–11. ACM Press, New York, NY, USA. ISBN 0-89791-109-1
- [346] Wolberg G (1994) **Digital Image Warping**. IEEE CS Press. ISBN 0818689447 URL http://www-cs.engr.ccny.cuny.edu/~wolberg/diw.html
- [347] Wolfson HJ and Rigoutsos I (1997) **Geometric Hashing: An Overview**. IEEE Computational Science & Engineering **4**(4), 10–21 URL http://www.math.tau.ac.il/~wolfson/
- [348] Woo M, Davis and Sheridan MB (1999) OpenGL® Programming Guide: The Official Guide to Learning OpenGL, Version 1.2. Addison-Wesley. ISBN 0201604582

 URL ftp://ftp.sgi.com/opengl/
- [349] Xu G and Zhang Z (1996) Epipolar Geometry in Stereo, Motion, and Object Recognition: A Unified Approach. Kluwer Academic Publishers. ISBN 0792341996 URL http://www.cv.cs.ritsumei.ac.jp/~xu/index.html
- [350] Yao AC and Yao FF (1985) A General Approach to d Dimensional Geometric Queries. In Proc. 7th Sympos. Theory of Computing (STOC), pp. 163–168. ACM Press. ISBN 0-89791-151-2. DOI:10.1145/22145.22163
 URL http://www.cs.princeton.edu/~yao/
- [351] Yianilos PN (1998) Excluded Middle Vantage Point Forests for Nearest Neighbor Search. Technical report, NEC Research Institute, Princeton, NJ URL http://www.pnylab.com/pny/papers/vp2/main.html
- [352] Yianilos PN (2000) Locally Lifting the Curse of Dimensionality for Nearest Neighbor Search. In Proc. 11th Sympos. on Discrete Algorithms (SODA), pp. 361–370. Society for Industrial and Applied Mathematics. ISBN 0-89871-453-2 URL http://www.pnylab.com/pny/papers/vp3/main.html
- [353] Yu J and McMillan L (2004) A Framework for Multiperspective Rendering. In Eurographics Symposium on Rendering. Norrkoping, Sweden URL http://people.csail.mit.edu/jingyiyu/research/EGRW04/EGSR2004.pdf
- [354] Zatloukal K, Johnson MH and Ladner R (2002) Nearest Neighbor Search for Data Compression. In M Goldwasser, D Johnson and C McGeoch (Eds.), Data Structures, Nearest Neighbor Searches, and Methodology: 5th/6th DIMACS Implementation Challenges
 URL http://web.mit.edu/kevinz/www/

- [355] Zelinka S and Garland M (2003) Interactive Texture Synthesis on Surfaces Using Jump Maps. In Proc. 14th Eurographics Workshop on Rendering (EGRW), pp. 90–96. Eurographics Association, Aire-la-Ville, Switzerland, Switzerland. ISBN 3-905673-03-7 URL http://graphics.cs.uiuc.edu/~zelinka/jumpmaps/jumpmap_egsr2003.pdf
- [356] Zelinka S and Garland M (2004) Jump Map-based Interactive Texture Synthesis. ACM Trans Graph (TOG) 23(4), 930–962. ISSN 0730-0301. DOI:10.1145/1027411. 1027413

 URL http://graphics.cs.uiuc.edu/~zelinka/jumpmaps/jumpmap_tog2004.pdf
- [357] Zhang B (2000). **Generalized** k-Harmonic Means URL http://www.hpl.hp.com/techreports/2000/HPL-2000-137.html
- [358] Zhang B, Hsu M and Dayal U (1999). k-Harmonic Means—A Data Clustering Algorithm. Tech. Rep. HPL-1999-124 URL http://www.hpl.hp.com/techreports/1999/HPL-1999-124.html
- [359] Zhang B, Hsu M and Dayal U (2001) k-Harmonic Means—A Spatial Clustering Algorithm with Boosting. In Proc. 1st Int. Workshop on Temporal, Spatial, and Spatio-Temporal Data Mining, pp. 31–45. Springer-Verlag. ISBN 3-540-41773-7
- [360] Zhang Z (2000) A Flexible New Technique for Camera Calibration. IEEE Trans Pattern Anal Mach Intell (TPAMI) 22(11), 1330–1334. ISSN 0162-8828. DOI:10.1109/34.888718

 URL http://research.microsoft.com/~zhang/calib/
- [361] Zhao F and Guibas L (2004) Wireless Sensor Networks—An Information Processing Approach. Elsevier/Morgan-Kaufman, Amsterdam. ISBN 1558609148 URL http://research.microsoft.com/~zhao/wsnbook.html
- [362] Zomorodian A (2005) **Topology for Computing**. Cambridge University Press. ISBN 0521836662 URL http://graphics.stanford.edu/~afra/book.html
- [363] Zwicker M, Pfister H, van Baar J and Gross M (2001) Surface Splatting. In Proc. 28th Comp. Graph. (SIGGRAPH), pp. 371–378. ACM Press. ISBN 1-58113-374-X. DOI:10.1145/383259.383300 URL http://people.csail.mit.edu/matthias/Papers/SurfaceSplatting.pdf