Bibliography

Bajaj, C., Bernardini, F. & Xu, G. [1995]. Automatic reconstruction of surfaces and scalar fields from 3D scans, *Proceedings of SIGGRAPH '95 (Los Angeles, CA, Aug. 6-11, 1995)*, ACM Press, pp. 109–118.

Baribeau, R. & Rioux, M. [1991]. Influence of speckle on laser range finders, *Applied Optics* **30**(20): 2873–2878.

Bergevin, R., Soucy, M., Gagnon, H. & Laurendeau, D. [1996]. Towards a general multi-view registration technique, *IEEE Transactions on Pattern Analysis and Machine Intelligence* **18**(5): 540–547.

Besl, P. [1989]. *Advances in Machine Vision*, Springer-Verlag, chapter 1 - Active optical range imaging sensors, pp. 1–63.

Besl, P. & McKay, H. [1992]. A method for registration of 3-d shapes, *IEEE Transactions on Pattern Analysis and Machine Intelligence* **14**(2): 239–256.

Bickel, G., Haulser, G. & Maul, M. [1985]. Triangulation with expanded range of depth, *Optical Engineering* **24**(6): 975–977.

Boissonnat, J.-D. [1984]. Geometric structures for three-dimensional shape representation, *ACM Transactions on Graphics* **3**(4): 266–286.

Bracewell, R. [1986]. *The Fourier Transform and Its Applications*, second ed., Mcgraw-Hill.

Buzinski, M., Levine, A. & Stevenson, W. [1992]. Performance characteristics of range sensors utilizing optical triangulation, *Proceedings of the IEEE 1992 National Aerospace and Electronics Conference, NAECON 1992*, pp. 1230–1236.

Chien, C., Sim, Y. & Aggarwal, J. [1988]. Generation of volume/surface octree from range data, *The Computer Society Conference on Computer Vision and Pattern Recognition*, pp. 254–60.

Connolly, C. I. [1974]. *Cumulative Generation of Octree Models from Range Data*, PhD thesis, Stanford University.

Connolly, C. I. [1984]. Cumulative generation of octree models from range data, *Proceedings, Intl. Conf. Robotics*, pp. 25–32.

Curless, B. & Levoy, M. [1995]. Better optical triangulation through spacetime analysis, *Proceedings of IEEE International Conference on Computer Vision*, pp. 987–994.

Curless, B. & Levoy, M. [1996]. A volumetric method for building complex models from range images, *Proceedings of SIGGRAPH '96 (New Orleans, LA, August 5-9 1996)*, ACM Press, pp. 303–312.

Dolenc, A. [1993]. Software tools for rapid prototyping technologies in manufacturing, *Acta Polytechnica Scandinavica: Mathematics and Computer Science Series* **Ma62**: 1–111.

Dorsch, R., Hausler, G. & Herrmann, J. [1994]. Laser triangulation: fundamental uncertainty in distance measurement, *Applied Optics* **33**(7): 1306–1314.

Duncan, J. [1993]. The beauty in the beasts, *Cinefex* **55**: 55–95.

Eberly, D., Gardner, R., Morse, B., Pizer, S. & Scharlach, C. [1994]. Ridges for image analysis, *Journal of Mathematical Imaging and Vision* **4**(4): 353–373.

Edelsbrunner, H. & Mücke, E. [1992]. Three-dimensional alpha shapes, *Workshop on Volume Visualization*, pp. 75–105.

Edwards, C. & Penney, D. [1982]. *Calculus and Analytic Geometry*, Prentice Hall, Inc.

Elfes, A. & Matthies, L. [1987]. Sensor integration for robot navigation: combining sonar and range data in a grid-based representation, *Proceedings of the 26th IEEE Conference on Decision and Control*, pp. 1802–1807.

Foley, J., van Dam, A., Feiner, S. & Hughes, J. [1992]. *Computer Graphics: Principles and Practice*, Addison-Wesley Publishing Company.

Francon, M. [1979]. *Laser Speckle and Applications in Optics*, Academic Press.

Freyburger, B. [1994]. Personal communication. Stanford University.

Fujii, H., Uozumi, J. & Asakura, T. [1976]. Computer sumulation study of image speckle patterns with relation to object surface profile, *J. Opt. Soc. Am.* **66**(11): 1222–1217.

Gagnon, H., Soucy, M., Bergevin, R. & Laurendeau, D. [1994]. Registration of multiple range views for automatic 3-D model building, *Proceedings 1994 IEEE Computer Society Conference on Computer Vision and Pattern Recognition*, pp. 581–586.

Garcia, G. [1989]. Development of 3-d imaging systems for postal automation, *CAD/CAM Robotics and Factories of the Future. 3rd International Conference (CARS and FOF '88) Proceedings*, pp. 209–216.

Goodman, J. [1984]. *Laser Speckle and Related Phenomena*, Springer-Verlag, chapter 1 - Statistical properties of laser speckle patterns, pp. 9–76.

Goodman, J. W. [1968]. *Introduction to Fourier optics*, McGraw-Hill.

Grosso, E., Sandini, G. & Frigato, C. [1988]. Extraction of 3D information and volumetric uncertainty from multiple stereo images, *Proceedings of the 8th European Conference on Artificial Intelligence*, pp. 683–688.

Hausler, G. & Heckel, W. [1988]. Light sectioning with large depth and high resolution, *Applied Optics* **27**(24): 5165–5169.

Hebert, P., Laurendeau, D. & Poussart, D. [1993]. Scene reconstruction and description: geometric primitive extraction from multiple viewed scattered data, *Proceedings of IEEE Conference on Computer Vision and Pattern Recognition*, pp. 286–292.

Heeger, D. & Bergen, J. [1995]. Pyramid-based texture analysis/synthesis, *Proceedings of SIGGRAPH '94 (Orlando, FL, July 24-29, 1994)*, ACM Press, pp. 229–238.

Hilton, A., Toddart, A., Illingworth, J. & Windeatt, T. [1996]. Reliable surface reconstruction from multiple range images, *Fourth European Conference on Computer Vision*, Vol. I, pp. 117–126.

Hong, T.-H. & Shneier, M. O. [1985]. Describing a robot's workspace using a sequence of views from a moving camera, *IEEE Transactions on Pattern Analysis and Machine Intelligence* **7**(6): 721–726.

Hoppe, H., DeRose, T., Duchamp, T., McDonald, J. & Stuetzle, W. [1992]. Surface reconstruction from unorganized points, *Computer Graphics (SIGGRAPH '92 Proceedings)*, Vol. 26, pp. 71–78.

Horn, B. [1986]. *Robot Vision*, The MIT Press.

Irani, M. & Peleg, S. [1991]. Improving resolution by image registration, *CVGIP: Graphical Models and Image Processing* **53**(3): 231–239.

Jain, A. [1989]. *Fundamentals of Digital Image Processing*, Prentice Hall.

Janesick, J., Elliot, T., Collins, S., Blouke, M. & Freeman, J. [1987]. Scientific charge-coupled devices, *Optical Engineering* **26**(8): 692–714.

Jarvis, R. [1983]. A perspective on range-finding techniques for computer vision, *IEEE Trans. Pattern Analysis Mach. Intell.* **5**: 122–139.

Juha, M. & Souder, C. [1987]. How 3d imaging simplifies surface mount inspection, *Proceedings of the Technical Program of the National Electronic Packaging and Production Conference - NEPCON West '87*, pp. 558–566.

Kanade, T., Gruss, A. & Carley, L. [1991]. A very fast vlsi rangefinder, *1991 IEEE International Conference on Robotics and Automation*, Vol. 39, pp. 1322–1329.

Krishnamurthy, V. & Levoy, M. [1996]. Fitting smooth surfaces to dense polygon meshes, *Proceedings of SIGGRAPH '96 (New Orleans, LA, August 5-9 1996)*, ACM Press, pp. 313–324.

Lacroute, P. [1995]. Personal communication. Stanford University.

Lacroute, P. [1996]. Analysis of a parallel volume rendering system based on the shear-warp factorization, *IEEE Transactions on Visualization and Computer Graphics* **2**(3): 218–231.

Lacroute, P. & Levoy, M. [1994]. Fast volume rendering using a shear-warp factorization of the viewing transformation., *Proceedings of SIGGRAPH '94 (Orlando, FL, July 24-29, 1994)*, ACM Press, pp. 451–458.

Li, A. & Crebbin, G. [1994]. Octree encoding of objects from range images, *Pattern Recognition* **27**(5): 727–739.

Lorensen, W. & Cline, H. E. [1987]. Marching cubes: A high resolution 3D surface construction algorithm, *Computer Graphics (SIGGRAPH '87 Proceedings)*, Vol. 21, pp. 163–169.

Martin, W. & Aggarwal, J. [1983]. Volumetric descriptions of objects from multiple views, *IEEE Transactions on Pattern Analysis and Machine Intelligence* **5**(2): 150–158.

Montani, C., Scateni, R. & Scopigno, R. [1994]. A modified look-up table for implicit disambiguation of marching cubes, *Visual Computer* **10**(6): 353–355.

Mundy, J. & Porter, G. [1987]. *Three-dimensional machine vision*, Kluver Academic Publishers, chapter 1 - A three-dimensional sensor based on structured light, pp. 3–61.

Nayar, S., Ikeuchi, K. & Kanade, T. [1990]. Shape from interreflections, *1990 IEEE International Conference on Computer Vision*, pp. 2–11.

Nayar, S., Watanabe, M. & Noguchi, M. [1995]. Real-time focus range sensor, *Proceedings of IEEE International Conference on Computer Vision*, pp. 995–1001.

Ning, P. & Bloomenthal, J. [1993]. An evaluation of implicit surface tilers, *IEEE Computer Graphics and Applications* **13**(6): 33–41.

Papoulis, A. [1991]. *Probability, Random Variables, and Stochastic Processes*, third ed., Mcgraw-Hill.

Pieper, S., Rosen, J. & Zeltzer, D. [1992]. Interactive graphics for plastic surgery: A task-level analysis and implementation, *1992 Symposium on Interactive 3D Graphics*, pp. 127–134.

Pito, R. [1996]. A sensor based solution to the next best view problem, *Proceedings of the 13th International Conference on Pattern Recognition*, pp. 941–945.

Potmesil, M. [1987]. Generating octree models of 3D objects from their silhouettes in a sequence of images, *Computer Vision, Graphics, and Image Processing* **40**(1): 1–29.

Press, W. H., Flannery, B. P., Teukolsky, S. A. & Vetterling, W. T. [1986]. *Numerical Recipes in C*, Cambridge University Press.

Rioux, M., Bechthold, G., Taylor, D. & Duggan, M. [1987]. Design of a large depth of view three-dimensional camera for robot vision, *Optical Engineering* **26**(12): 1245–1250.

Rutishauser, M., Stricker, M. & Trobina, M. [1994]. Merging range images of arbitrarily shaped objects, *Proceedings 1994 IEEE Computer Society Conference on Computer Vision and Pattern Recognition*, pp. 573–580.

Sato, Y. & Ikeuchi, K. [1996]. Recovering shape and reflectance properties from a sequence of range and color images, *1996 IEEE/SICE/RSJ International Conference on Multisensor Fusion and Integration for Intelligent Systems*, pp. 493–500.

Schey, H. [1992]. *Div, Grad, Curl, and All That*, W.W. Norton and Company.

Schroeder, W. & Lorensen, W. [1992]. Decimation of triangle meshes, *Computer Graphics (SIGGRAPH '92 Proceedings)*, Vol. 26, pp. 65–70.

Siegman, A. [1986]. *Lasers*, University Science Books.

Slevogt, H. [1974]. *Technische Optik*, pp. 55–57.

Soucy, M. & Laurendeau, D. [1992]. Multi-resolution surface modeling from multiple range views, *Proceedings 1992 IEEE Computer Society Conference on Computer Vision and Pattern Recognition*, pp. 348–353.

Soucy, M. & Laurendeau, D. [1995]. A general surface approach to the integration of a set of range views, *IEEE Transactions on Pattern Analysis and Machine Intelligence* **17**(4): 344–358.

Soucy, M., Laurendeau, D., Poussart, D. & Auclair, F. [1990]. Behaviour of the center of gravity of a reflected gaussian laser spot near a surface reflectance discontinuity, *Industrial Metrology* **1**(3): 261–274.

Stoddart, A. & Hilton, A. [1996]. Registration of multiple point sets, *Proceedings of the 13th International Conference on Pattern Recognition*, pp. 40–44.

Strand, T. [1983]. Optical three dimensional sensing, *Optical Engineering* **24**(1): 33–40.

Succi, G., Sandini, G., Grosso, E. & Tistarelli, M. [1990]. 3D feature extraction from sequences of range data, *Robotics Research. Fifth International Symposium*, pp. 117–127.

Szeliski, R. [1993]. Rapid octree construction from image sequences, *CVGIP: Image Understanding* **58**(1): 23–32.

Tarbox, G. & Gottschlich, S. [1994]. IVIS: An integrated volumetric inspection system, *Proceedings of the 1994 Second CAD-Based Vision Workshop*, pp. 220–227.

Taubin, G. [1995]. A signal processing approach to fair surface design, *Proceedings of SIGGRAPH '95 (Los Angeles, CA, Aug. 6-11, 1995)*, ACM Press, pp. 351–358.

Turk, G. & Levoy, M. [1994]. Zippered polygon meshes from range images, *Proceedings of SIGGRAPH '94 (Orlando, FL, July 24-29, 1994)*, ACM Press, pp. 311–318.

Wada, T., Hiroyuki, H. & Matsuyama, T. [1995]. Shape from shading with interreflections under proximal light source, *1995 IEEE International Conference on Computer Vision*, pp. 66–71.

Weinstock, R. [1974]. *The Calculus of Variations, with Applications to Physics and Engineering*, Dover Publications.