

S. Brown, B. Morse, and W. Barrett. Interactive part selection for mesh and point models using hierarchical graph-cut. In A. A. Gooch and M. Tory, editors, Proceedings of the Graphics Interface 2009 Conference, pages 23–30, May 2009.

Christopher J. Armstrong, Brian L. Price, William A. Barrett: “Interactive Segmentation of Image Volumes with Live Surface,” *Computers and Graphics*, vol. 31, no. 2, 2007, pp 212-229.

Brian Price and William Barrett: “Object-based vectorization for interactive image editing,” Vol. 22, Numbers 9-11, *The Visual Computer - International Journal of Computer Graphics/Pacific Graphics 2006*, pp. 661-670.

Christopher J. Armstrong, William A. Barrett and Brian Price, “Live Surface,” Eurographics/IEEE Proceedings, *Fifth International Workshop on Volume Graphics 2006*, pp. 87-94, 142, Boston, Massachusetts, July, 2006.

L. J. Reese , E. N. Mortensen., and W. A. Barrett, "Image Editing with Intelligent Paint," Eurographics, Vol. 21, No. 3, p. 714-724, 2002.

W. A. Barrett and A.S. Cheney: “[Object-Based Image Editing](#),” ACM Transactions on Graphics, July, 2002, Vol. 21, Number 3, (*Proceedings of ACM SIGGRAPH 2002*), pp. 777-784.

W. A. Barrett and K.D. Petersen: “Houghing the Hough: Peak Collection for Detection of Corners, Junctions and Line Intersections,” *Computer Vision and Pattern Recognition 2001*, Vol. 2, p. 302-309, December, 2001.

K. Duffin and W. A. Barrett: “Fast Focal Length Solution in Partial Panoramic Image Stitching,” *Computer Vision and Pattern Recognition 2001*, Vol. 2, P. 690-695, December, 2001.

E. N. Mortensen, L. J. Reese, and W. A. Barrett, "Intelligent Selection Tools," in Proc. IEEE: Computer Vision and Pattern Recognition (CVPR '00), Vol. II, pp. 776-777, Hilton Head, SC, June 2000.

E. Sokolowsky, P.K. Egbert, K.L. Duffin, and W.A. Barrett: “Image Origami,” Proceedings of the Fifth International Conference on Virtual Systems and Multimedia, pp. 14-23, Dundee, Scotland, September 1, 1999.

Eric N. Mortensen and William A. Barrett: "Interactive Segmentation with Intelligent Scissors,” *Graphical Models and Image Processing*, 60, pp. 349-384, September, 1998.

Kirk Duffin and William Barrett: “Globally Optimal Image Mosaics,” Proceedings Graphics Interface, June, '98, pp. 217-222.

David Tam, William Barrett, Bryan Morse and Eric Mortensen: “Breakpoint Skeletal Representation and Compression of Document Images,” IEEE Data Compression Conference (DCC '98), pp. 75, Snowbird, Utah, March 1998

Gene Ware, Steve Houston, Doug Chabries, Mary Miller, Karl Taube, Bealriz de la Fuente, William Barrett and Kirk Duffin: "Infrared Imaging, Photography, and Computer Composition of Precolombian Murals at Bonampak Mexico: an Interdisciplinary Perspective on Ancient Art," Utah Academy of Sciences, Arts, & Letters, April 1996.

Eric Mortensen and William Barrett: "[Intelligent Scissor for Image Composition](#)," *Computer Graphics (SIGGRAPH '95 Proceedings)*, pp. 191-198, (Los Angeles, CA, August 6-11, 1995).

David Taylor and William Barrett: "Image Segmentation using Globally Optimal Growth in Three Dimensions with an Adaptive Feature Set," *Visualization in Biomedical Computing '94*, Mayo Clinic, October, 1994. SPIE Vol. 2359 pp. 98-107.

William Barrett, Eric Mortensen and Eric Bess: "Interpolation by Directed Distance Morphing," *Visualization in Biomedical Computing '94*, Mayo Clinic, October, 1994. SPIE Vol. 2359, pp. 110-121.

Kirk Duffin and William Barrett: "Spiders: A New User Interface for Intuitive Rotation and Visualization of N-dimensional Point Sets," IEEE Proceedings of *Visualization '94*, October, 1994, pp. 205-211.

William Barrett and Eric Bess: "A New Approach for Grayscale Interslice Image Interpolation", AAAI (American Association of Artificial Intelligence) - Stanford Spring '94 Symposium on "Applications of Computer Vision to Medical Image Processing," pp. 80-83, March, 1994.

David C. Taylor and William A. Barrett: "An Algorithm for Continuous Resolution Polygonalization of a Discrete Surface," *Graphics Interface '94*, pp. 33-42, 1994.

David C. Taylor and William A. Barrett: "Flyby over Banff," *Graphics Interface '94*, Electronic Theatre - *header piece* and show piece.

William Barrett, Eric Mortensen, and David Taylor: "An Image Space Algorithm for Morphological Contour Interpolation," *Graphics Interface '94*, pp. 16-24, 1994.

Russell Stringham and William A. Barrett: "Shape-Based Interpolation of Grayscale Serial Slice Images", *SPIE Vol. 1898, Medical Imaging VII 1993: Image Processing*, pp. 105-115, Newport Beach, February, 1993.

Eric Mortensen and William A. Barrett: "Morphological Interpolation Between Contours", *SPIE Vol. 1898, Medical Imaging VII 1993: Image Processing*, pp. 501-510, Newport Beach, February, 1993.

Winston L. Williams and William A. Barrett: "Optical Flow Interpolation of Serial Slice Images", *SPIE Vol. 1898, Medical Imaging VII 1993: Image Processing*, pp. 93-104, Newport Beach, February, 1993.

Kevin Christiansen and William Barrett: "An Improved Method for Color Quantization," *IEEE Data Compression Conference (DCC '93)*, Presented at Snowbird, Utah, March, 1993.

John M. Boone, J. Antony Seibert, William A. Barrett, and Eric Blood: "Analysis and Correction of Imperfections in the Image Intensifier-TV-Digitizer Imaging Chain," *Journal of Medical Physics*, Vol. 18, No. 2, pp. 236-242, March/April, 1991.

Shawn C. Becker, William A. Barrett, and Dan R. Olsen Jr.: "Interactive Measurement of 3D Objects Using a Depth Buffer and Linear Probes," *ACM Transactions on Graphics*, Vol. 10, No. 2, pp. 200-207, April 1991.

Shawn C. Becker and William A. Barrett: "Interactive Morphometrics from Three-Dimensional Surface Images." *IEEE Proceedings of The First Conference on Visualization in Biomedical Computing*, pp. 418-425, May, 1990.

Jayaram K. Udupa and William A. Barrett: "A PC-Based 3D Imaging System for Biomedical Data." *IEEE Proceedings of The First Conference on Visualization in Biomedical Computing*, pp. 295-303, May, 1990.

Sai P. Raya, Jayaram K. Udupa, and William A. Barrett: "A PC-Based 3D Imaging System: Algorithms, Software, and Hardware Considerations." *Journal of Computerized Medical Imaging and Graphics*, Vol. 14, Number 5, pp. 353-370, March, 1990.

Sidney M. Petersen, William A. Barrett, and Robert P. Burton: "A New Morphological Algorithm for Automated Interpolation of Height Grids from Contour Images." *SPIE Stereoscopic Displays and Applications*, Volume 1256, pp. 62-72, February, 1990.

Shawn C. Becker and William A. Barrett: "Interactive Measurement of Three-Dimensional Cardiac Morphology." *IEEE Proceedings of Computers in Cardiology*, pp. 429-432, Jerusalem, September, 1989.

William A. Barrett, Sai P. Raya, and Jayaram K. Udupa: "A Low-Cost PC-Based Image Workstation for Dynamic Interactive Display of Three-Dimensional Anatomy", *SPIE Proceedings of Medical Imaging III: Image Capture and Display*, Vol. 1091, pp. 346-355, 1989.

William A. Barrett: "Interactive Measurement and Display of Three- and Four- Dimensional Anatomy", *SPIE Proceedings of Biostereometrics '88*, Volume 1030, pp. 155-162, Basel, Switzerland, 1988.

Scott R. Cannon, Steven J. Allan, and William A. Barrett: "A Parallel-Processing Subsystem for Rapid 3-D Interpolation of CT Images, *IEEE Proceedings of Computers in Cardiology*, pp. 75-78, Bethesda, MD., 1988.

William A. Barrett and Jayaram K. Udupa: "Dynamic Display and Quantitative Analysis of Three-Dimensional Left Ventricular Pathology", *IEEE Proceedings of Computers in Cardiology*, pp. 7-12, Bethesda, MD., 1988.

William A. Barrett and H. Eisenberg: "Dynamic Three- and Four-Dimensional Display of Skeletal and Cardiac Anatomy", **Invited Paper**, *NCGA*, pp. 35-44, Philadelphia, March, 1987.

William A. Barrett: "High Speed Interactive 3D Display of Contracting Cardiac and Rotating Skeletal Anatomy", **Invited Paper**, *IEEE Proceedings of Engineering in Medicine and Biology*, pp 1944-5, Fort Worth, Texas, 1986.

William A. Barrett: "Dynamic Three-Dimensional Shaded Surface Display of the Rotating, Beating Left Ventricle, Atrium, and Aorta from Cine CT", *IEEE Proceedings of Computers in Cardiology*, pp. 491-495, Boston, MA, October, 1986.

J.F. Cornhill, William A. Barrett, Ed E. Herderick, R.W. Mahley, and D.L. Fry: "Topographic Study of Sudanophilic Lesions in Cholesterol Fed Minipigs by Image Analysis," *Journal of Arteriosclerosis*, Vol. 5, No. 5, pp. 415-426, 1985.

William A. Barrett, J.M. DeLeo, J.F. Cornhill, and D.L. Fry: "A System for Automated Analysis of Plaque Formation in Experimental Atherosclerosis," Presented at the *53rd Scientific Sessions of the American Heart Association*, November 19, 1980.

Fred Cornhill, William Barrett, and Don Fry: "Quantitative Topography of Experimental Atherosclerosis," *Proceedings of Hemodynamics and the Arterial Wall*, Houston, TX, November, 1980.