Bibliography

[1] R.C. Gonzalez and R.E. Woods, *Digital Image Processing*. Prentice Hall, 2001.

[2] M. Sonka, V. Hlavac, and R. Boyle, *Image Processing, Analysis and Machine Vision.* International Thomson, 1999.

[3] H. Freeman, "On the encoding of arbitrary geometric configurations," *IRE Trans. Electron. Comput.*, vol. EC-10, pp. 260-268, 1961.

[4] W.H. Tsai and S.S. Yu, "Attributed string matching with merging for shape recognition," *IEEE Trans. Pattern Anal. Machine Intell.*, vol. 7, no. 4, pp. 453-462, July 1985.

[5] T. Kaneko and M. Okudaira, "Encoding of arbitrary curves based on the chain code representation, " IEEE Transactions on Communications, vol. 33, no. 7, pp. 697-707, July 1985.

[6] D.H. Ballard and C.M. Brown, *Computer Vision*. Prentice Hall, 1982.

[7] D. Vernon, "Two-dimensional object recognition using partial contours," *Image and Vision Computing*, vol. 5, no. 1, pp. 21-27, 1987.

[8] L. Gupta and M. D. Srinath, "Invariant planar shape recognition using dynamic alignment,"in *IEEE International Conference on Acoustics, Speech, and Signal Processing*, pp. 360-363, Dallas, Texas , 1987.

[9] H. Samet, "The quadtree and related hierarchical data structures," *ACM Computing Surveys*, vol. 16, no. 2, pp. 187-260, 1984.

[10] D. R. Fuhrmann, "Quadtree traversal algorithmsfor pointer-based and depth-first representations," *IEEE Transactions on Pattern Analysis and Machine Intelligence*, pp.955-960, 1988.

[11] V. Khanna, P. Gupta, and C. J. Hwang, "Maintenance of connected components in quadtree-based image representation," in *Proceedings of the International Conference on Information Technology: Coding and Computing*, pp. 647-651, Las Vegas, 2001.

[12] J. Sklansky, R. Chazin, and B. Hansen, “Minimum-perimeter polygons of digitized silhouettes”. *IEEE Transactions on Computers*, pp.260-268, 1972.

[13] Y.Sato, “Piecewise linear approximation of plane curves by perimeter optimization, ” *Pattern Recognition*, no. 12, pp. 1535-1543, December 1992.

[14] Miguel Angel Garcia, Angel Domingo Sappa and Luis Basanez, “Fast generation of adaptive quadrilateral meshes from range images”, *Proceedings of the IEEE International Conference on Robotics and Automation Albuquerque*, New Mexico, April 1997.

[15] K. Hara, H. Zha, T. Hasegaa and T. Nagata, “3-D object modeling based on surface reconstruction and integration using optimal polygonal approximation”, *IEEE International Conference on Computational Cybernetics and Simulation*, vol. 3, pp.2644-2649, 1997.

[16] J. R. Shewchuk, “Triangle: Engineering a 2-D quality mesh generator and delaunay triangulator”, *Applied Computational Geometry*, pp. 124-133, Philadelphia, Pennsylvania, May 1996.

[17] N. Ahmed, T. Natarjan, and K.R. Rao, “Discrete cosine transform,” *IEEE Trans. Computers*, vol. C-23, no. 1, pp. 90-93, Jan. 1974.

[18] N. Ahmed and K.R. Rao, *Orthogonal Transforms for Digital Signal Processing.* Springer-Verlag, 1975.

[19] E.L. Hall, *Computer Image Processing and Recognition.* Academic Press, 1979.

[20] A. Rosenfeld, *Multiresolution Image Processing and Analysis.* Springer Verlag, 1984.

[21] P.J. Burt and E.H. Adelson, “The Laplacian pyramid as a compact code,” *IEEE Trans. Commun.*, vol. 31, no. 4, pp. 337-345, Apr. 1983.

[22] http://fourier.eng.hmc.edu/e161/lectures/canny/node3.html

[23] S.G. Mallat, “A theory for multiresolution signal decomposition: the wavelet representation,” *IEEE Trans. Pattern Anal. Machine Intell.*, vol. 11, pp. 674-693, July 1989.

[24] M. Antonini, M. Barlaud, P.Mathieu and I. Daubechies, “Image Coding Using Wavelet Transform,” *IEEE Transactions on Image Processing*, vol. 1, pp. 205-220, April 1992.

[25] S. Mallat, *A Wavelet Tour of Signal Processing*. Academic Press, 1998.

[26] http://www.amara.com/IEEEwave/IEEEwavelet.html

[27] Y. Fisher, "Fractal image compression," *SIGGRAPH Course Notes*, 1992.

[28] http://www.ti.com/sc/docs/psheets/abstract/apps/bpra065.htm

[29] A. E. Jacquin, "Fractal image coding : a review," *Proc. of the IEEE*, vol. 81, no. 10, pp.1451-1465, 1993.

[30] K.U. Barthel, J. Schüttemeyer, T. Voyéand, and P. Noll. "A new image coding technique unifying fractal and transform coding, " *IEEE International Conference on Image Processing*, vol. III, pp. 112-116, Austin Texas, 1994.

[31] P.J.L. van Beek, *Edge-Based Image Representation and Coding*, Ph. D. thesis, Delft University of Technology, 1995.

[32] C. H. Lee, "Image Surface Approximation with Irregular Samples," *IEEE Trans. Patt. Anal. Machine Intell.*, vol. 11, pp. 206-212, 1989.

[33] S. Lakshmanan, A.K. Jain, and Y. Zhong, "Multi-resolution image representation using Markov random fields," *IEEE Int. Conf. Image Processing*, vol. 1, pp. 855-860, 1994.

[34] Y.P. Wang, "Image representations using multiscale differential operators," *IEEE Trans. Image Processing*, vol. 8, no. 12, pp. 1757-1771, Dec. 1999.

[35] S. Mallat and S. Zhong, "Characterization of signals from multiscale edges," *IEEE Trans. Pattern Anal. Machine Intell.*, vol. 14, no. 7, pp. 710-732, July 1992.

[36] Y. Wang and S.K. Mitra, "Image representation using block pattern models and its image processing applications," *IEEE Trans. Pattern Anal. Machine Intell.*, vol. 15, no. 4, pp. 321-336, Apr. 1993.

[37] H.H. Liu, "*The Analysis of Image Surface by Using Curvature Information of Image Surface*", Mater Thesis, Department of EE, NCTU, Taiwan, 1997.

[38] S.H Jong, "*The Extraction of the High-Curvature Feature Points in Image Surface*", Master Thesis, Department of EE, NCTU, Taiwan, 1998.

[39] M.P. Do Carmo, *Differential Geometry of Curves and Surfaces.* Prentice Hall, 1976

[40] J. van de Weijer, L.J. van Vliet, P.W. Verbeek, and M. van Ginkel, "Curvature estimation in oriented patterns using curvilinear models applied to gradient vector fields," *IEEE Trans. Pattern Anal. Machine Intell.*, vol. 23, no. 9, pp. 1035-1042, 2001.

[41] B. Rieger and L.J. van Vliet, “Curvature of n-dimensional space curves in grey-value images,” *IEEE Trans. Image Processing*, vol. 11, no. 7, pp. 738-745, 2002.

[42] R. Bracho and A.C. Sanderson, “Segmentation of images based on intensity gradient information,” in *Proceeding* of *IEEE Computer Soc. Conf. on Computer Vision and Pattern Recognition*, pp. 341-347, San Francisco, CA, 1985.

[43] P. Meer, J.-M. Jolion, and A. Rosenfeld, “A fast parallel algorithm for blind estimation of noise variance,” *IEEE Trans. Pattern Anal. Machine Intell.*, vol. 12, pp. 216-223, 1990.

[44] K. Rank, M. Lendl, and R. Unbehauen, “Estimation of image noise variance,” *IEE Proceedings on Vision, Image and Signal Processing*, vol. 146, no. 2, pp. 80-84, Apr. 1999.

[45] Y. Itoh, “An edge-oriented progressive image coding,” *IEEE Trans. Circuits Syst. Video Technol.*, vol.6, no. 2, pp. 135-142, Apr. 1996.

[46] R.S. Berns, *Billmeyer and Saltzman's Principles of Color Technology*, John Wiley & Sons, 2000.

[47] J.F. Canny, “A computational approach to edge detection,” *IEEE Trans. Pattern Anal. Machine Intell.*, vol. 8, no. 6, pp. 679-698, 1986.

[48] C. De Boor, “On Calculation with B-splines,” *J. Approxim. Theory*, vol. 6, pp. 50-62, 1972.

[49] P. Lancaster and K. Salkauskas, *Curve and Surface Fitting: An Introduction.* Academic Press, 1986.

[50] F. W. Meier, G. M. Schuster, and A. K. Katsaggelos, “A mathematical model for shape coding with B-splines,” *Signal Processing: Image Communications*, Vol. 15, pp. 685-701, May 2000.

[51] H.H. Hsu, T.K. Shih, L. H. Lin, and R.C. Chang, “Adaptive Image Transmission by Strategic Decomposition,” in *Proceedings of the 18th International Conference on Advanced Information Networking and Applications*, Japan, Mar. 2004.

[52] O. Egger and W. Li, “Subband Coding of Images Using Asymmetrical Filter Banks,” *IEEE Trans. Image Processing*, Apr. 1995, pp. 478-485.

[53] P.J.L. van Beek, *Edge-Based Image Representation and Coding*, Ph. D. thesis, Delft University of Technology, 1995.

[54] A. Kaup and T.Aach, "Coding of Segmented Images Using Shape-Independent Basis Functions," *IEEE Trans. Image Processing*, July 1998, pp. 937-947.

[55] A. M. Ramírez, A.D. Sánchez, M.L. Aranda, J.V. Pineda, "An Architecture for Fractal Image Compression Using Quad-tree Multiresolution," in *Proceedings of the IEEE International Symposium on Circuits and Systems*, Vancouver, Canada. May 2004, pp. 897-900.

[56] M. Accame and F. Granelli, "Hierarchical Progressive Image Coding Controlled by a Region Based Approach," *IEEE Trans. Consumer Electronics*, Feb. 1999, pp. 13-20.

[57] W. B. Pennebacker and J. L. Mitchell, JPEG Still Image Compression Standard, New York: Van Nostrand, 1993.

[58] M. J. Gormish, D. Lee, M.W. Marcellin, "JPEG 2000: Overview, Architecture, and Applications," in *Proceedings of the IEEE Int. Conf. on Image Processing*, Vancouver, Canada, Sept. 2000, pp. 29-32.

[59] F. A. Pellegrino, W. Vanzella, and V. Torre, "Edge Detection Revisited," *IEEE Trans. System, Man and Cybernetics*, Vol. 34, No. 3, 2004, pp. 1500-1517.

[60] S.M. Smith and M. Brady, SUSAN - A New Approach to Low Level Image Processing, *International Journal of Computer Vision*, Vol. 23, No. 1, 1997, pp. 45-78.

[61] M.A. Ruzon and C. Tomasi, Edge, Junction, and Corner Detection Using Color Distributions, *IEEE Trans. Pattern Anal. Mach. Intell.*, 2002, pp. 1281-1295.

[62] Z. Zheng, H. Wang and E.K. Teoh, Analysis of Gray Level Corner Detection, *Pattern Recognition Letters*, Vol. 20, 1999, pp.149-162.

[63] F. van der Heijden, Edge and Line Feature Extraction Based on Covariance Models, *IEEE Trans. Pattern Anal. Mach. Intell.*, Vol. 17, No. 1, 1995, pp. 16–33.

[64] K. R. Rao and J. Ben-Arie, Optimal Edge Detection Using Expansion Matching and Restoration, *IEEE Trans. Pattern Anal. Mach. Intell.*, Vol. 16, No. 12, 1994, pp. 1169–1182.

[65] C. Harris and M. Stephens, A Combined Corner and Edge Detector, in *Proceeding of the Fourth Alvey Vision Conference*, 1988, pp.147-151.

[66] H.C. Chen, W.J. Chien and S.J. Wang, Contrast-Based Color Image Segmentation, *IEEE Signal Processing Letters*, Vol. 11, No.7, 2004, pp.641-644.

[67] Y. Deng and B.S. Manjunath, Unsupervised Segmentation of Color-Texture Regions in Images and Video, *IEEE Trans Pattern Anal. Machine Intell.*, Vol. 23, No. 8, 2001, pp. 800-810.

[68] M. Kass, A. Witkin, and D. Terzopoulos, “Snakes: Active Contour Models,” *Proc. Int’l Conf. Computer Vision*, vol. 87, pp. 259-268, 1987.

[69] E. Saund, D. Fleet, D. Larner, and J. Mahoney, “Perceptually-Supported Image Editing of Text and Graphics,” *Proc. UIST*, pp. 183-192, 2003.

[70] E. Mortensen and W. Barrett: "Intelligent Scissor for Image Composition," *Proc. SIGGRAPH*, pp. 191-198, 1995.

[71] D.C. Chang and W.R. Wu, “Image Contrast Enhancement Based on a Histogram Transformation of Local Standard Deviation,” *IEEE Trans. Medical Imaging*, pp. 518-531, 1998.

[72] A. Polesel, G. Ramponi, and V.J. Mathews, "Adaptive Unsharp Masking for Contrast Enhancement," *Proc. IEEE International Conference on Image Processing*, pp.26-29, 1997.

[73] J. Elder, R. Goldberg, ”Image Editing in the Contour Domain,” *IEEE Trans. Pattern Anal. Machine Intell.*, pp. 291-296, 2001.

[74] J. Shi and C. Tomasi. Good Features to Track. IEEE Conference on Computer Vision and Pattern Recognition, pages 593-600, 1994.

[75] R. Deriche and G. Giruadon, “A Computational Approach for Corner and Vertex Detection”, INRIA Research Report, 1992.