

References

- Y. Boykov, O. Veksler, and R. Zabih. Fast approximate energy minimization via graph cuts. *IEEE Trans. on Pattern Analysis and Machine Intelligence*, 23(11):1222–1239, 2001.
- J. Dolan and E.M. Riseman. Computing curvilinear structure by token-based grouping. In *Int. Conf. on Computer Vision and Pattern Recognition*, pages 264–270, 1992.
- W. Förstner. A framework for low level feature extraction. In *European Conf. on Computer Vision*, pages B:383–394, 1994.
- S. Grossberg and E. Mingolla. Neural dynamics of form perception: Boundary completion. *Psychological Review*, 92(2):173–211, 1985.
- S. Grossberg and D. Todorovic. Neural dynamics of 1-d and 2-d brightness perception: A unified model of classical and recent phenomena. *Perception and Psychophysics*, 43:723–742, 1988.
- G. Guy and G. Medioni. Inferring global perceptual contours from local features. *Int. Journ. of Computer Vision*, 20(1/2):113–133, 1996.
- G. Guy and G. Medioni. Inference of surfaces, 3d curves, and junctions from sparse, noisy, 3d data. *IEEE Trans. on Pattern Analysis and Machine Intelligence*, 19(11):1265–1277, 1997.

- F. Heitger and R. von der Heydt. A computational model of neural contour processing: Figure-ground segregation and illusory contours. In *Int. Conf. on Computer Vision*, pages 32–40, 1993.
- D.W. Jacobs. Robust and efficient detection of salient convex groups. *IEEE Trans. On Pattern Analysis and Machine Intelligence*, 18(1):23–37, 1996.
- A.K. Jain and R.C. Dubes. *Algorithms for Clustering Data*. Prentice-Hall, Englewood Cliffs, NJ, 1988.
- U. Köthe. Integrated edge and junction detection with the boundary tensor. In *Int. Conf. on Computer Vision*, pages 424–431, 2003.
- Z. Li. A neural model of contour integration in the primary visual cortex. *Neural Computation*, 10:903–940, 1998.
- D.G. Lowe. *Perceptual Organization and Visual Recognition*. Kluwer, Dordrecht, 1985.
- D. Marr. *Vision*. Freeman Press, San Francisco, 1982.
- R. Mohan and R. Nevatia. Perceptual organization for scene segmentation and description. *IEEE Trans. on Pattern Analysis and Machine Intelligence*, 14(6):616–635, 1992.

- P. Parent and S.W. Zucker. Trace inference, curvature consistency, and curve detection. *IEEE Trans. on Pattern Analysis and Machine Intelligence*, 11(8):823–839, 1989.
- P.T. Sander and S.W. Zucker. Inferring surface trace and differential structure from 3-D images. *IEEE Trans. on Pattern Analysis and Machine Intelligence*, 12(9):833–854, 1990.
- E. Saund. Finding perceptually closed paths in sketches and drawings. *IEEE Trans. On Pattern Analysis and Machine Intelligence*, 25(4):475–491, 2003
- S. Schaal and C.G. Atkeson. Constructive incremental learning from only local information. *Neural Computation*, 10(8):2047–2084, 1998.
- A. Shashua and S. Ullman. Structural saliency: The detection of globally salient structures using a locally connected network. In *Int. Conf. on Computer Vision*, pages 321–327, 1988.
- J. Shi and J. Malik. Normalized cuts and image segmentation. *IEEE Trans. on Pattern Analysis and Machine Intelligence*, 22(8):888–905, 2000.
- J. Wang, Z. Zhang, and H. Zha. Adaptive manifold learning. In L.K. Saul, Y. Weiss, and L. Bottou, editors, *Advances in Neural Information Processing Systems 17*, Cambridge, MA, 2005. MIT Press.

- L.R.Williams and D.W. Jacobs. Stochastic completion fields: A neural model of illusory contour shape and salience. *Neural Computation*, 9(4):837–858, 1997.
- L.R.Williams and K.K. Thornber. A comparison of measures for detecting natural shapes in cluttered backgrounds. *Int. Journ. of Computer Vision*, 34(2-3):81–96, 1999.
- S.C. Yen and L.H. Finkel. Extraction of perceptually salient contours by striate cortical networks. *Vision Research*, 38(5):719–741, 1998.

Tensor Voting References

Books:

- G. Medioni, M.S. Lee, and C.K. Tang. *A Computational Framework for Segmentation and Grouping*. Elsevier, New York, NY, 2000.
- P. Mordohai and G. Medioni, *Tensor Voting: A Perceptual Organization Approach to Computer Vision And Machine Learning*, A.C. Bovik (editor), Synthesis Lectures on Image, Video, and Multimedia Processing, Morgan & Claypool, 2006.

Journal Papers:

- J. Jia and C.K. Tang. Tensor Voting for Image Correction by Global and Local Intensity Alignment. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, vol. 27, no. 1, pages 36-50, 2005
- J. Jia and C.K. Tang. Inference of Segmented Color and Texture Information by Tensor Voting. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, vol. 26, no. 6, pages 771-786, 2004
- M.S. Lee and G. Medioni. Grouping \cdot , $-$, \rightarrow , O -, into Regions, Curves, and Junctions. *Computer Vision and Image Understanding*, vol. 76, no. 1, pp. 54-69, 1999.

- M.S. Lee, G. Medioni, and P. Mordohai. Inference of segmented overlapping surfaces from binocular stereo. *IEEE Trans. on Pattern Analysis and Machine Intelligence*, vol. 24, no. 6, pages 824–837, 2002.
- P. Mordohai and G. Medioni. Stereo using Monocular Cues within the Tensor Voting Framework. *IEEE Trans. on Pattern Analysis and Machine Intelligence*, vol. 28, no. 6, pages 968-982, 2006.
- M. Nicolescu and G. Medioni. Layered 4-D Representation and Voting for Grouping from Motion, *IEEE Trans. on Pattern Analysis and Machine Intelligence* , vol. 25, no. 4, pages 492-501, 2003.
- M. Nicolescu and G. Medioni. A voting-based computational framework for visual motion analysis and interpretation. *IEEE Trans. on Pattern Analysis and Machine Intelligence*, vol. 27, no. 5, pages 739-752, 2005.
- Leo Reyes, Eduardo Bayro-Corrochano, Gérard Medioni. Registration of 3D points using geometric algebra and tensor voting. *Int. Journal of Computer Vision*, 2007.
- C.K. Tang and G. Medioni. Inference of integrated surface, curve, and junction descriptions from sparse 3d data. *IEEE Trans. on Pattern Analysis and Machine Intelligence*, 20(11):1206–1223, 1998.

- C.K. Tang, G. Medioni. Curvature-Augmented Tensorial Framework for Integrated Shape Inference from Noisy, 3-D Data. *IEEE Trans. on Pattern Analysis and Machine Intelligence*, vol. 24, no. 6, pp. 858-864, 2002.
- C.K. Tang, G. Medioni, and M.S. Lee. N-dimensional tensor voting and application to epipolar geometry estimation. *IEEE Trans. on Pattern Analysis and Machine Intelligence*, vol. 23, no. 8, pages 829–844, 2001.
- W.S. Tong and C.K. Tang. Robust Estimation of Adaptive Tensors of Curvature by Tensor Voting. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, vol. 27, no. 3, pages 434-449, 2005
- W.S. Tong, C.K. Tang, and G. Medioni. Simultaneous two-view epipolar geometry estimation and motion segmentation by 4d tensor voting. *IEEE Trans. on Pattern Analysis and Machine Intelligence*, vol. 26, no. 9, pages 1167–1184, 2004.
- W.S. Tong, C.K. Tang, P. Mordohai, and G. Medioni. First order augmentation to tensor voting for boundary inference and multiscale analysis in 3d. *IEEE Trans. on Pattern Analysis and Machine Intelligence*, vol. 26, no. 5, pages 594–611, 2004.

Book Chapters

- G. Medioni and P. Mordohai. The tensor voting framework. *in Emerging Topics in Computer Vision, S.B. Kang and G. Medioni, editors, 2004.*
- G. Medioni and P. Mordohai. Saliency in computer vision. *in Neurobiology of Attention, L. Itti, G. Rees, and J. Tsotsos, editors, 2005.*
- G. Medioni, P. Mordohai, and M. Nicolescu. The tensor voting framework. *in the Handbook of Computational Geometry for Pattern Recognition, Computer Vision, Neurocomputing and Robotics, E. Bayro-Corrochano, editor, 2005.*

Conference Proceedings

- J. Jia and C.K. Tang. Image Repairing: Robust Image Synthesis by Adaptive ND Tensor Voting. In *CVPR*, pp. 1:643-650, 2003
- E. Kang, I. Cohen and G. Medioni, "Robust affine motion estimation in joint image space using tensor voting", In *ICPR*, vol. 4, pp. 256-259, 2002.
- E. Kang, I. Cohen and G. Medioni. A Non-Iterative Approach to Multiple 2D Motion Estimation. In *ICPR*, vol. 4, pp. 791-794, 2004.

- P. Kornprobst and G. Medioni. Tracking Segmented Objects using Tensor Voting, In *CVPR*, vol. 2, pp. 118-125, 2000.
- M.S. Lee and G. Medioni. Inferring Segmented Surface Description from Stereo Data. In *CVPR*, pp. 346-352, 1998.
- C. Min and G. Medioni. Tensor Voting Accelerated by Graphics Processing Units (GPU). In *ICPR*, 2006
- C. Min and G. Medioni. Motion Segmentation by Spatiotemporal Smoothness Using 5D Tensor Voting. In *Fifth Workshop on Perceptual Organization in Computer Vision*, 2006
- C. Min, Q. Yu, and G. Medioni. Multi-layer Mosaics in the Presence of Motion and Depth Effects. In *ICPR*, 2006
- P. Mordohai, M.S. Lee, and G. Medioni. Inference of segmented overlapping surfaces from binocular and multiple-view stereo. In *Third Workshop on Perceptual Organization in Computer Vision*, 2001.
- P. Mordohai and G. Medioni. Perceptual grouping for multiple view stereo using tensor voting. In *ICPR*, pp. III: 639–644, 2002.

- P. Mordohai and G. Medioni. Dense multiple view stereo with general camera placement using tensor voting. In *Second International Symposium on 3-D Data Processing, Visualization and Transmission*, pp. 725–732, 2004.
- P. Mordohai and G. Medioni. Junction inference and classification for figure completion using tensor voting. In *Fourth Workshop on Perceptual Organization in Computer Vision*, pp. 56–63, 2004.
- P. Mordohai and G. Medioni. Stereo using monocular cues within the tensor voting framework. In *ECCV*, pp. 588–601, 2004.
- P. Mordohai and G. Medioni. Unsupervised dimensionality estimation and manifold learning in high-dimensional spaces by tensor voting. In *Int. Joint Conf. on Artificial Intelligence*, pp. 798-803, 2005.
- M. Nicolescu and G. Medioni. 4-D Voting for Matching, Densification and Segmentation into Motion Layers, In *ICPR*, pp. III:303-308, 2002.
- M. Nicolescu and G. Medioni. Perceptual Grouping from Motion Cues Using Tensor Voting in 4-D, In *ECCV*, vol. III, pp. 423-437, 2002.

- M. Nicolescu, C. Min and G. Medioni. Analysis and Interpretation of Multiple Motions through Surface Saliency. In *Int. Workshop on Spatial Coherence for Visual Motion Analysis*, 2004
- C.K. Tang and G. Medioni. Extremal Feature Extraction from 3-D Vector and Noisy Scalar Fields. In *IEEE Visualization*, pp. 95-102, 1998.
- C.K. Tang and G. Medioni. Integrated Surface, Curve and Junction Inference from Sparse 3-D Data Sets. In *ICCV*, pp. 818-824, 1998.
- C.K. Tang, G. Medioni, and M.S. Lee. Epipolar Geometry Estimation by Tensor Voting in 8D. In *ICCV*, vol. 1, pp. 502-509, 1999.
- C.K. Tang and G. Medioni. Robust Estimation of Curvature Information from Noisy 3D Data for Shape Description, In *ICCV*, vol. 1, pp. 426-433, 1999.
- W.S. Tong, C.K. Tang. ROD-TV: Reconstruction on demand by Tensor Voting. In *CVPR*, pp. II:391-398, 2003
- W.S. Tong, C.K. Tang and G. Medioni. First Order Tensor Voting, and Application to 3-D Scale Analysis, In *CVPR*, vol. 1, pp. 175-182, 2001.
- W.S. Tong, C.K. Tang and G. Medioni. Epipolar Geometry Estimation for Non-Static Scenes by 4D Tensor Voting, In *CVPR*, vol. 1, pp. 926-933, 2001.