CVAP List of Publications

January 15, 2007

This document lists the publications of the Computational Vision and Active Perception Laboratory at KTH. It is divided into four parts:

- Comprehensive list. Each major contribution is listed only as one item here, even if it exists in several forms.
- Technical notes, i.e., short contributions not included in the comprehensive list.
- Journal articles.
- Books, book chapters and contributions to conference proceedings.

All four lists are sorted in approximate chronological order; the first two lists by the date of the original version of each paper, and the last two lists by the publication date. Reprints can be ordered from

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From the Web and ftp servers, abstracts and PostScript manuscripts corresponding to some of these publications can also be reached.

Comprehensive list

[CVAP304] J. M. C. Jorda, "Intelligent task-level grasp mapping for robot control", Master thesis TRITA-CSC-CV 2006:3, ISRN-KTH/CSC/CV–06/03–SE, Sept. 2006.

[CVAP303] E. Topp, "Initial steps toward human augmented mapping", Tech. Rep. TRITA-CSC-A 2006:13 ISSN-1653-5723, ISRN-KTH/CSC/A–06/13–SE, ISBN 91-7178-452-7, Sept. 2006.

[CVAP301] E.A.Topp and H.Hüttenrauch, "Human augmented mapping - a pilot study", Technical Report TRITA-CSC-CV 2006:1, ISSN 1653-6622, CVAP301, CSC, Mar 2006.

[CVAP300] R. Johansson, “Large-scale information acqusiition for data and information fusion”, tech. rep., Mar. 2006. TRITA-CSC-A 2006:2.

[CVAP299] C-M. Fahlkrantz, “On the evaluation of print mottle”, Doctoral Dissertation TRITA-NA-P0540, NADA/CVAP, KTH, Stockholm, Sweden, dec 2005.

[CVAP298] A. Pronobis and B Caputo, “The KTH-INDECS database”, tech. rep., NADA/CVAP, KTH, Stockholm, Sweden, sep 2005.

[CVAP297] John Folkesson, “Simultaneous localization and mapping with robots”, Doctoral Dissertation TRITA-NA-P0528, NADA/CVAP, KTH, Stockholm, Sweden, sep 2005.

[CVAP296] E.A. Topp, “Evaluation of a multiple target tracking approach for following and passing persons”, Technical report TRITA-NA-P0502, NADA/CVAP, KTH, Stockholm, Sweden, mar 2005.

[CVAP295] F. Furesj, “Multiple cue object recognition”, Licentiate Thesis ISRN KTH/NA/P--05/06--SE, Feb. 2005.

[CVAP294] M. Eriksson, “Video based analysis and visualization of human action”, Doctoral Dissertation TRITA-NA-P0438, NADA/CVAP, KTH, Stockholm, Sweden, jan 2005.

[CVAP293] B. Caputo, “A new kernel method for object recognition: Spin glass-markov random fields”, Doctoral Dissertation TRITA-NA-P0430, NADA/CVAP, KTH, Stockholm, Sweden, nov 2004.

[CVAP292] O. Ramstrm, “Visual attention using game theory”, Licentiate Thesis ISRN KTH/NA/P--04/23--SE, October 2004.

[CVAP291] R. Johansson and R. Suzic, “Bridging the gap between information need and information acquisition”, in *Proceedings of the seventh international conference on information fusion* (Per Svensson and Johan Schubert, eds.), (Stockholm, Sweden), pp. 1202–1209, July 2004.

[CVAP290] F. Furesj and H.I. Christensen, “Evaluation of the influence of feature detectors and photometric descriptors in object recognition”, Tech. Rep. ISRN KTH/NA/P--04/06--SE, June 2004.

[CVAP289] I. Laptev, “Local spatio-temporal image features for motion interpretation”, Doctoral Dissertation TRITA-NA-P0413, NADA/CVAP, KTH, Stockholm, Sweden, apr 2004.

[CVAP288] P. Nillius, *Image Analysis using the Physics of Light Scattering*. PhD thesis, KTH (Royal Institute of Technology), June 2004.

[CVAP287] T. Lindeberg, A. Akbarzadeh, and I. Laptev, “Galilean-corrected spatio-temporal interest operators”, Tech. Rep. ISRN KTH/NA/P--04/05--SE, Mar. 2004.

[CVAP286] P. Nillius and J.-O. Eklundh, “Classifying materials from their reflectance properties”, article, Feb. 2004. Also in Proc. ECCV 04.

[CVAP285] C. Undeman and T. Lindeberg, “Fully automatic segmentation of MRI brain images using probabilistic anisotropic diffusion and multi-scale watersheds”, Tech. Rep. ISRN KTH/NA/P--03/13--SE, Dec. 2003. Shortened version in Proc. Scale-Space’03, Isle of Skye, Scotland, Springer Lecture Notes in Computer Science, volume 2695, pages 641–656.

[CVAP284] I. Laptev and T. Lindeberg, “On space-time interest points”, Tech. Rep. ISRN KTH/NA/P--03/12--SE, Oct. 2003. Shortened versions in Proc. Scale-Space’03, Isle of Skye, Scotland, Springer Lecture Notes in Computer Science, volume 2695, pages 372-387 and International Conference on Computer Vision, Nice, France, pages 432-439.

[CVAP283] R. Johansson, “Information acquisition in data fusion systems”, Licentiate thesis ISRN KTH/NA/P--03/28--SE, Nov. 2003.

[CVAP282] P. Nillius and J.-O. Eklundh, “Phenomenological eigenfunctions for image irradiance”, article, Oct. 2003. Also in Proc. ICCV 03.

[CVAP281] P. Althaus, “Indoor navigation for mobile robots: Control and representations”, Doctoral Dissertation ISRN KTH/NA/P--03/22--SE, Oct. 2003.

[CVAP280] J. Folkesson and Henrik Christensen, “Graphical slam - a self-correcting map”, Tech. Rep. ISRN KTH/NA/P--03/10--SE, Oct. 2003.

[CVAP279] T. Lindeberg and L. Bretzner, “Real-time scale selection in hybrid multi-scale representations”, Tech. Rep. ISRN KTH/NA/P--03/07--SE, June 2003. Shortened version in Proc. Scale-Space’03, Isle of Skye, Scotland. Springer LNCS vol 2695, pages 148–163.

[CVAP278] R. Johansson, N. Xiong, and H.I. Christensen, “A game theoretic model for allocation of mobile sensors”, Tech. Rep. ISRN KTH/NA/P--03/06--SE, June 2003.

[CVAP277] P. Nillius and J.-O. Eklundh, “Low-dimensional representations of shaded surfaces under varying illumination”, article, June 2003. To appear in CVPR03.

[CVAP276] P. Nillius and J.-O. Eklundh, “Automatic estimation of the projected light source direction”, article, Dec. 2001. Appeared in CVPR01.

[CVAP275] R. Johansson, N. Xiong, and H. I. Christensen, “A game theoretic model for allocation of mobile sensors”, article, Feb. 2003. Also in Proceedings of the 6th International Conference on Information Fusion, pages 583-590.

[CVAP274] N. Xiong, H. I. Christensen, and P. Svensson, “Negotiation of target distribution enhancing system survivability”, article, Feb. 2003. To be submitted to IEEE Transactions on Systems, Man and Cybernetics.

[CVAP273] R. Johansson and N. Xiong, “Perception management - an emerging concept for information fusion”, article 3, Jan. 2003. Information Fusion, 2003.

[CVAP272] J.-O. Eklundh M. Rosbacke and H.I. Christensen, “A representational framework for robots”, report ISRN KTH/NA/P--03/03--SE, Jan. 2003.

[CVAP271] C. Rother, “Multi-view reconstruction and camera recovery using a real or virtual reference plane”, Doctoral Dissertation, ISRN KTH/NA/P--02/26--SE, Jan. 2003.

[CVAP270] K.K. Sim, B. Caputo, F. Furesjo, and A.J. Smola, “SVMs for object recognition: which kernel should I use?”, report, ISRN KTH/NA/P--02/16--SE, Dec. 2002.

[CVAP269] A.Saffiotti, H.I. Christensen, and T. Duckett, “Swedish workshop on autonomous robots - SWAR' 02”, report, ISRN KTH/NA/P--02/12--SE, Sept. 2002.

[CVAP268] P. Nillius and J.-O. Eklundh, “Fast block matching with normalized cross-correlation using Walsh transforms”, report, ISRN KTH/NA/P--02/11--SE, Sept. 2002.

[CVAP267] A. Miller and H. Christensen, “Implementation of multi-rigid-body dynamics within a robotic grasping simulator”, report ISRN KTH/NA/P--02/09--SE, Aug. 2002.

[CVAP266] M. Zucchelli, “Optical flow based structure from motion”, Doctoral Dissertation, ISRN KTH/NA/P--02/11--SE, June 2002.

[CVAP265] M. Bjrkman, “Real time motion and stereo cues for active visual observers”, Doctoral Dissertation, ISRN KTH/NA/P--02/13--SE, June 2002.

[CVAP264] I. Laptev and T. Lindeberg, “Velocity-adaptation of spatio-temporal receptive fields for direct recognition of activities: An experimental study”, report ISRN KTH/NA/P--02/04--SE, Mar. 2002. Shortened version in Proc. ECCV'02 Workshop on Statistical Methods in Video Processing, pages 61–66. Revised version to appear in Image and Vision Computing.

[CVAP263] G. Zunino, “Simultaneous localization and mapping for navigation in realistic enviroments”, Licenciate thesis, ISRN KTH/NA/P--02/03--SE, Mar. 2002.

[CVAP262] D. Tell, "Wide baseline matching with applications to visual servoing", Doctoral Dissertation, ISRN KTH/NA/P--02/05--SE, Mar. 2002.

[CVAP261] L. Petersson, "A framework for integration of processes in autonomous systems", Doctoral Dissertation, ISRN KTH/NA/P--02/04--SE, Feb. 2002.

[CVAP260] D. Tell, "Visual servoing on planar textured objects", report, ISRN KTH/NA/P--02/03--SE, Feb. 2002.

[CVAP259] D. Kragic and H. I Christensen, "Survey on visual servoing for manipulation", report, ISRN KTH/NA/P--02/01--SE, Jan. 2002.

[CVAP258] T. Lindeberg, "Time-recursive velocity-adapted spatio-temporal scale-space filters", report, ISRN KTH/NA/P--01/23--SE, Nov. 2001. Shortened version in Proc. ECCV'02, Copenhagen, Denmark, May 2002. Springer Lecture Notes in Computer Science, vol 2350, pages I:52–67.

[CVAP257] T. Lindeberg, "Linear spatio-temporal scale-space", report, ISRN KTH/NA/P--01/22--SE, Nov. 2001.

[CVAP256] H. Sidenbladh and M. Black, "Learning the statistics of people in images and video", report, ISRN KTH/NA/P--01/18--SE, Oct. 2001.

[CVAP255] H. Sidenbladh, "Probabilistic tracking and reconstruction of 3D human motion in monocular video sequences", Doctoral Dissertation, ISRN KTH/NA/P--01/14--SE, Oct. 2001.

[CVAP254] M. Bray, "Recognition of gestures in the context of speech", report, ISRN KTH/NA/P--01/19--SE, Aug. 2001.

[CVAP253] D. Kragic, "Visual Servoing for Manipulation: Robustness and Integration Issues", Doctoral Dissertation, ISRN KTH/NA/P--01/16--SE, June 2001.

[CVAP252] D. Roobaert, "Pedagogical Support Vector Learning: A Pure Learning Approach to Object Recognition", Doctoral Dissertation, ISRN KTH/NA/P--01/15--SE, May 2001.

[CVAP251] L. Bretzner, I. Laptev, T. Lindeberg, S. Lenman, and Y. Sundblad, "A prototype system for computer vision based human computer interaction", report, ISRN KTH/NA/P--01/09--SE, Apr. 2001.

[CVAP250] C. Rother and S. Carlsson, "Linear multi view reconstruction and camera recovery", report, ISRN KTH/NA/P--01/08--SE, Apr. 2001.

[CVAP249] I. Laptev and T. Lindeberg, “A multi-scale feature likelihood map for direct evaluation of object hypotheses”, report, ISRN KTH/NA/P--01/03--SE, Mar. 2001. Shortened version in IEEE Workshop on Scale-Space and Morphology, Vancouver, Canada, July 2001, M. Kerckhove (Ed.), Volume 2106 of Springer Verlag Lecture Notes in Computer Science, pages 98–110.

[CVAP248] D. Nistér, “Automatic dense reconstruction from uncalibrated video sequences”, Doctoral Dissertation, ISRN KTH/NA/P--01/02--SE, Mar. 2001.

[CVAP247] J.-O. Eklundh and H. I. Christensen, “Computer vision: Past and future”, report,, Oct. 2000. Also in: Informatics - 10 years back, 10 years ahead, R. Wilhelm (ed.), Lecture Notes in Computer Science, Vol. 2000, Springer Verlag, Berlin.

[CVAP246] P. Nordlund, “An exception correct C++ singleton template base class with controlled destruction order”, report, ISRN KTH/NA/P--00/14--SE, Oct. 2000.

[CVAP245] I. Laptev and T. Lindeberg, “Tracking of multi-state hand models using particle filtering and a hierarchy of multi-scale image features”, report, ISRN KTH/NA/P--00/12--SE, Sept. 2000. Shortened version in IEEE Workshop on Scale-Space and Morphology, Vancouver, Canada, July 2001, M. Kerckhove (Ed.), Volume 2106 of Springer Verlag Lecture Notes in Computer Science, pages 63–74.

[CVAP244] A. C. Dominguez-Brito, M. Andersson, and H. I. Christensen, “A software architecture for programming robotic systems based on the discrete event paradigm”, report, ISRN KTH/NA/P--00/13--SE, Sept. 2000.

[CVAP243] H. I. Christensen and P. J. Phillips (Eds.), “Proceedings of the second workshop on empirical evalution methods in computer vision”, proceedings,, Sept. 2000.

[CVAP242] D. Roobaert, “DIRECT SVM: A fast and simple support vector machine perception”, article, ISRN KTH/NA/P--00/10--SE, sep 2000.

[CVAP241] M. Björkman and J.-O. Eklundh, “Dynamic fixation in an active visual agent”, article,, Sept. 2000.

[CVAP240] I. Laptev, H. Mayer, T. Lindeberg, W. Eckstein, C. Steger, and A. Baumgartner, “Automatic extraction of roads from aerial images based on scale-space and snakes”, report, ISRN KTH/NA/P--00/06--SE, mar 2000. Machine Vision and Applications, 12(1):23-31, 2000.

[CVAP239] K. T. Simsarian, “Toward human-robot collaboration”, Doctoral Dissertation, ISRN KTH/NA/P--00/04--SE, mar 2000.

[CVAP238] M. Rosbacke, P. E. Roland, and T. Lindeberg, “Evaluation of using absolute vs. relative base level when analyzing brain activation images using the scale-space primal sketch”, report, ISRN KTH/NA/P--99/14--SE, dec 1999. Also in: Journal of Medical Image Analysis, Volume 5, Issue 2, June 2001, pp. 89-110.

[CVAP237] L. Bretzner and T. Lindeberg, “Structure and motion estimation using sparse point and line correspondences in multiple affine views”, report, ISRN KTH/NA/P--99/13--SE, 1999.

[CVAP236] D. Roobaert, P. Nillius, and J.-O. Eklundh, “Comparison of learning approaches to appearance-based 3D object recognition with and without cluttered environment”, article,, Sept. 1999. Also in: Proc. of the Fourth Asia Conference on Computer Vision (ACCV2000), Taipei, Taiwan, January 8-11, 2000.

[CVAP235] D. Roobaert, “Improving the generalisation of linear support vector machines: An application to 3D object recognition with cluttered background”, article,, Sept. 1999. Also in: Proc. of the Workshop on Support Vector Machines at the 16th International Joint Conference on Artificial Intelligence, July 31-August 6, 1999, Stockholm, Sweden.

[CVAP234] D. Roobaert and M. M. Van Hulle, “View-based 3D object recognition with support vector machines”, article,, Sept. 1999. Also in: Proc. IEEE International Workshop on Neural Networks for Signal Processing, August 23-25, 1999, Wisconsin, USA.

[CVAP233] D. Roobaert and M. M. Van Hulle, “The self-organising invariant representation map”, article,, Sept. 1999.

[CVAP232] L. Bretzner and T. Lindeberg, “Qualitative multi-scale feature hierarchies for object tracking”, report, ISRN KTH/NA/P--99/09--SE, Sept. 1999. Also in Springer Lecture Notes in Computer Science, vol 1682,pp. 117–128. and Journal of Visual Communication and Image Representation, vol 11, pp115–129.

[CVAP231] L. Bretzner, “Multi-scale feature tracking and motion estimation”, Doctoral Dissertation, ISRN KTH/NA/P--99/07--SE, Oct. 1999.

[CVAP230] H. Winroth, “Dynamic projective geometry”, Doctoral Dissertation, ISRN KTH/NA/P--99/01--SE, Mar. 1999.

[CVAP229] M. Andersson, A. Orebäck, M. Lindström, and H.I. Christensen, “ISR An intelligent service robot”, article,, Feb. 1999.

[CVAP228] D. Tell and S. Carlsson, “View based visual servoing using epipolar geometry”, article,, Feb. 1999.

[CVAP227] P. Nordlund and M. Andersson, "Evaluation of software for robot interprocess communication", report, ISRN KTH/NA/P--99/02--SE, Feb. 1999.

[CVAP226] A. Almansa and T. Lindeberg, "Fingerprint enhancement by shape adaptation of scale-space operators with automatic scale-selection", report, ISRN KTH/NA/P--99/01--SE, Jan. 1999. Also in: IEEE Transactions on Image Processing, volume 9, number 12, pp 2027-2042, 2000.

[CVAP225] K. Wiltschi, A. Pinz, and T. Lindeberg, "An automatic assessment scheme for steel quality inspection", report, ISRN KTH/NA/P--98/20--SE, Nov. 1998. Machine Vision and Applications, to appear.

[CVAP224] O. Mertschat, "Mechanical design of a binocular vision system for a modular robot", report, ISRN KTH/NA/P--98/19--SE, Sept. 1998. (Submitted).

[CVAP223] T. Lindeberg, P. Lidberg, and P. E. Roland, "Analysis of brain activation patterns using a 3-d scale-space primal sketch", report, ISRN KTH/NA/P--98/18--SE, Sept. 1998. Also Human Brain Mapping vol 7, no 3, pp 166–194, 1999.

[CVAP222] T. Lindeberg, "Principles for automatic scale selection", report, ISRN KTH/NA/P--98/14--SE, Aug. 1998. In: B. Jhne (et al., eds), Handbook on Computer Vision and Applications, volume 2, pp 239-274, Academic Press, Boston, USA.

[CVAP221] D. Kragic, "Obstacle detection based on the inverse perspective mapping", report, ISRN KTH/NA/P--98/12--SE, Oct. 1998.

[CVAP220] C. G. Bräutigam, *A Model-Free Voting Approach to Cue Integration.* Doctoral dissertation,, Dept. of Numerical Analysis and Computing Science, KTH (Royal Institute of Technology), Aug. 1998.

[CVAP219] P. Fornland, *Visual Navigation in a Conspicuously Planar World.* Doctoral dissertation,, Dept. of Numerical Analysis and Computing Science, KTH (Royal Institute of Technology), May 1998.

[CVAP218] P. Nordlund, *Figure-Ground Segmentation Using Multiple Cues.* Doctoral dissertation,, Dept. of Numerical Analysis and Computing Science, KTH (Royal Institute of Technology), May 1998.

[CVAP217] P. Nordlund and J.-O. Eklundh, "Real-time maintenance of figure-ground segmentaion", report, ISRN KTH/NA/P--98/04--SE, May 1998. Also inProc. 1st Int. Conference on Computer Vision Systems.

[CVAP216] A. Almansa and T. Lindeberg, "Fingerprint enhancement by shape adaptation of scale-space operators with automatic scale-selection", report, ISRN KTH/NA/P--98/03--SE, Apr. 1998.

[CVAP215] R. Cretella, "Visual homing with color histogram and self-organizing feature map", report, ISRN KTH/NA/P--97/14--SE, Oct. 1997.

[CVAP214] S. Carlsson, "Geometric structure and view invariant recognition", report, ISRN KTH/NA/P--97/12--SE, Sept. 1997. Philosophical Transactions of the Royal Society of London Series A.

[CVAP213] H. Winroth, "A scripting language interface to C++ libraries", report, ISRN KTH/NA/P--97/11--SE, Aug. 1997. Also in proc. of TOOLS USA 1997.

[CVAP212] K. Wiltschi, T. Lindeberg, and A. Pinz, "Classification of carbide distributions using scale selection and directional distributions", report, ISRN KTH/NA/P--97/10--SE, 1997. Shortened version in Proc. 4th International Conference on Image Processing.

[CVAP211] T. Lindeberg, "On automatic selection of temporal scales in time-casual scale-space", report, ISRN KTH/NA/P--97/09--SE, July 1997. Also in Proc. AFPAC'97: Algebraic Frames for the Perception-Action Cycle.

[CVAP210] A. Lundquist, *Line Based Visual Navigation Using Pose Clustering.* Licentiate dissertation, Dept. of Numerical Analysis and Computing Science, KTH (Royal Institute of Technology), June 1997.

[CVAP209] P. Nordlund and J.-O. Eklundh, "Maintenance of figure-ground segmentation by cue-selection", report, ISRN KTH/NA/P--97/05--SE, Apr. 1997. Also in First Int. Workshop on Cooperative Distributed Vision 1997, Kyoto, Japan, pp 93–123.

[CVAP208] M. Andersson and F. Bergholm, "What is gained by monocular or binocular micromovements", report, ISRN KTH/NA/P--97/04--SE, Mar. 1997.

[CVAP207] A. Naeve, "Structure from translational motion", report, ISRN KTH/NA/P--97/02--SE, Mar. 1997. Submitted to AFPAC 97.

[CVAP206] P. Grostabussiat, "On hybrid multi-scale representations", Licentiate Dissertation ISRN KTH/NA/P--97/01--SE, Feb. 1997.

[CVAP205] S. Spiess and M. Li, "Kinematic calibration of an active binocular head for online computation of epipolar geometry", report, ISRN KTH/NA/P--96/34--SE, Oct. 96. Submitted to SCIA 97.

[CVAP204] J. Dias, F. Bergholm, and P. Fornland, "VIRGO vision-based robot navigation research network, overall considerations and a framework for vision based navigation", report, ISRN KTH/NA/P--96/27--SE, Sept. 1996.

[CVAP203] F. Bergholm and A. Francisco, "On the horopter and Hering-Hillebrand deviation", report, ISRN KTH/NA/P--96/26--SE, Aug. 1996.

[CVAP202] F. Bergholm, "On alternative cameras - active nonrigid, nonhomogeneous cameras", report, ISRN KTH/NA/P--96/25--SE, July 1996.

[CVAP201] L. Bretzner and T. Lindeberg, "Feature tracking with automatic selection of spatial scales", report, ISRN KTH/NA/P--96/21--SE, June 1996.

[CVAP200] J.-O. Eklundh, "Trends in active vision", report, ISRN KTH/NA/P--96/20--SE, May 1996.

[CVAP199] S. Carlsson and D. Weinshall, "Dual computation of projective shape and camera positions from multiple images", report, ISRN KTH/NA/P--96/19--SE, May 1996. To appear in International Journal of Computer Vision.

[CVAP198] T. Lindeberg, "Feature detection with automatic scale selection", report, ISRN KTH/NA/P--96/18--SE, May 1996. Extended version in *Int. J. of Computer Vision*, vol 30, number 2, 1998. (In press).

[CVAP197] A. Lundquist, "Pose estimation without explicit matching", report, ISRN KTH/NA/P--96/17--SE, May 1996.

[CVAP196] T. Lindeberg, "A scale selection principle for estimating image deformations", report, ISRN KTH/NA/P--96/16--SE, Apr. 1996. Image and Vision Computing (In press).

[CVAP195] G. Olofsson, *Active Recognition of Geons.* Doctoral dissertation,, Dept. of Numerical Analysis and Computing Science, KTH (Royal Institute of Technology), June 1996.

[CVAP194] T. Uhlin, *Fixation and Seeing Systems.* Doctoral dissertation,, Dept. of Numerical Analysis and Computing Science, KTH (Royal Institute of Technology), May 1996.

[CVAP193] C. Bräutigam, J. Gårding, and J.-O. Eklundh, "Seeing the obvious", report, ISRN KTH/NA/P--96/08--SE, Mar. 1996. Shortened version in Proc. 13th International Conference on Pattern Recognition.

[CVAP192] A. Maki, *Stereo Vision in Attentive Scene Analysis.* Doctoral dissertation,, Dept. of Numerical Analysis and Computing Science, KTH (Royal Institute of Technology), Mar. 1996. ISRN KTH/NA/P--96/07--SE.

[CVAP191] T. Lindeberg, "Edge detection and ridge detection with automatic scale selection", report, ISRN KTH/NA/P--96/06--SE, Jan. 1996.

Also in Proc. IEEE Comp. Soc. Conf. on Computer Vision and Pattern Recognition, 1996. Extended version in *Int. J. of Computer Vision*, vol 30, number 2, 1998. (In press).

[CVAP190] A. Maki, P. Nordlund, and J.-O. Eklundh, "A computational model of depth-based attention", report, ISRN KTH/NA/P--96/05--SE, Jan. 1996. Shortened version in Proc. 13th International Conference on Pattern Recognition.

[CVAP189] T. Lindeberg and D. Fagerström, "Scale-space with causal time direction", report, ISRN KTH/NA/P--96/04--SE, Jan. 1996. Also in Proc. 4th European Conference on Computer Vision.

[CVAP188] T. Uhlin and K. Johansson, "Autonomous mobile systems: A study of current research", report, ISRN KTH/NA/P--96/03--SE, Jan. 1996.

[CVAP187] J. Gårding, J. Porrill, J.P. Frisby, and J.E.W. Mayhew, "Uncalibrated relief reconstruction and model alignment from binocular disparities", report, ISRN KTH/NA/P--96/02--SE, Jan. 1996. Shortened version in Proc. 4th European Conference on Computer Vision.

[CVAP186] T. Lindeberg and M. Li, "Segmentation and classification of edges using minimum description length approximation and complementary junction cues", report, ISRN KTH/NA/P--96/01--SE, Jan. 1996. Shortened version in Theory and Applications of Image Analysis II, (G. Borgefors, ed.), World Scientific Publishing, Singapore, 1995, (In press).

[CVAP185] S. Carlsson, "Combinatorial geometry for shape representation and indexing", report, ISRN KTH/NA/P--95/23--SE, Dec. 1995. Also in *Object Representation in Computer Vision II, Lec. Notes in Computer Science 1144, pp 53 - 78 (1996).*

[CVAP184] S. Carlsson, "View variation and linear invariants in 2-D and 3-D", report, ISRN KTH/NA/P--95/22--SE, Dec. 1995.

[CVAP183] N. Petiniot, "Study of a binocular system for peripheral vision", report, ISRN KTH/NA/P--95/21--SE, Nov. 1995.

[CVAP182] M. Perrone, "Estimating human gaze direction", report, ISRN KTH/NA/P--95/20--SE, Nov. 1995.

[CVAP181] K. Brunnström and A. J. Stoddart, "Genetic algorithms for free-form surface matching", report, ISRN KTH/NA/P--95/19--SE, Oct. 1995. Revised March 1996, Shortened version in Proc. 13th International Conference on Pattern Recognition.

[CVAP180] W. Zhang, *Understanding Intensity and Illumination Transitions.* Doctoral dissertation,, Dept. of Numerical Analysis and Computing

Science, KTH (Royal Institute of Technology), Oct. 1995. ISRN KTH/NA/P--95/18--SE.

[CVAP179] A. Maki and T. Uhlin, “Disparity selection in binocular pursuit”, report, ISRN KTH/NA/P--95/17--SE, Sept. 1995. Also in IEICE, the Institute of Electronics Information and Communication Engineers Transactions on Information and Systems.

[CVAP178] A. Maki, L. Bretzner, and J.-O. Eklundh, “Local Fourier phase and disparity estimates: An analytical study”, report, ISRN KTH/NA/P--95/16--SE, Sept. 1995. Shortened version in Proc. 6th International Conf. on Computer Analysis of Images and Patterns.

[CVAP177] P. Grostabussiat and T. Lindeberg, “A visualization system for multi-scale image structures”, report, ISRN KTH/NA/P--95/14--SE, Aug. 1995.

[CVAP176] J. Gårding, “Surface orientation and curvature from differential texture distortion”, report, ISRN KTH/NA/P--95/10--SE, Apr. 1995. Shortened version in Proc. 5th International Conference on Computer Vision.

[CVAP175] S. Carlsson, “Duality of reconstruction and positioning from projective views”, report, ISRN KTH/NA/P--95/09--SE, Apr. 1995. Also in Proc. IEEE Workshop on Representations of Visual Scenes.

[CVAP174] T. Uhlin, P. Nordlund, A. Maki, and J.-O. Eklundh, “Towards an active visual observer”, report, ISRN KTH/NA/P--95/08--SE, Mar. 1995. Shortened version in Proc. 5th International Conference on Computer Vision pp 679–686.

[CVAP173] P. Nordlund and T. Uhlin, “Closing the loop: Pursuing a moving object by a moving observer”, report, ISRN KTH/NA/P--95/06--SE, Mar. 1995. Shortened version in Proc. 6th International Conf. on Computer Analysis of Images and Patterns. Also in Image and Vision Computing vol. 14, no 4, May 1996, pp 265–275.

[CVAP172] M. Li and J.-M. Lavest, “Some aspects of zoom-lens camera calibration”, report, ISRN KTH/NA/P--95/03--SE, Feb. 1995.

[CVAP171] M. Li, D. Betsis, and J.-M. Lavest, “Kinematic calibration of the KTH head-eye system”, report, ISRN KTH/NA/P--94/34--SE, Nov. 1994.

[CVAP170] T. Lindeberg, “Direct estimation of affine deformations of brightness patterns using visual front-end operators with automatic scale selection”, report, ISRN KTH/NA/P--94/33--SE, Nov. 1994. Also in Proc. 5th International Conference on Computer Vision.

[CVAP169] D. Betsis, "On the solution of the problem: $\min_{x \in R^n} \|Ax - b\|^2$ subject to $\|x\|^2$", report, ISRN KTH/NA/P--94/32--SE, Nov. 1994.

[CVAP168] D. Betsis, "On a problem arising in connection with the calibration of the KTH head-eye system", report, ISRN KTH/NA/P--94/31--SE, Nov. 1994.

[CVAP167] T. Lindeberg and M. Li, "Automatic generation of break points for MDL based curve classification", report, ISRN KTH/NA/P--94/28--SE, Sept. 1994. Also in 9th Scand Conf on Image Analysis, Uppsala, Sweden, June 1995.

[CVAP166] T. Lindeberg and L. Florack, "Foveal scale-space and linear increase of receptive field size as a function of eccentricity", report, ISRN KTH/NA/P--94/27--SE, Aug. 1994. (Submitted).

[CVAP165] K. Pahlavan and J.-O. Eklundh, "Mechatronics of active vision", report, ISRN KTH/NA/P--94/26--SE, Aug. 1994. Also in Mechatronics, vol. 4, 1994, pp 113–123, Elsevier Science Ltd, London.

[CVAP164] S. J. Dickinson, P. Jasiobedzki, G. Olofsson, and H. I. Christensen, "Qualitative tracking of 3-d objects using active contour networks", report, ISRN KTH/NA/P--94/25--SE, Aug. 1994. Shortened version in Proc. IEEE Comp. Soc. Conf. on Computer Vision and Pattern Recognition, 1994.

[CVAP163] S. Carlsson, "Sufficient image structure for 3-D motion and shape estimation", in *Proc. 3rd European Conference on Computer Vision* (J.-O. Eklundh, ed.), vol. 800 of *Lecture Notes in Computer Science*, (Stockholm, Sweden), pp. 83–91, Springer Verlag, Berlin, May 1994. Also in ISRN KTH/NA/P--94/24--SE, Aug. 1994.

[CVAP162] S. J. Dickinson, H. I. Christensen, J. Tsotsos, and G. Olofsson, "Active object recognition integrating attention and viewpoint control", report, ISRN KTH/NA/P--94/23--SE, Aug. 1994. Shortened version in Proc. 3rd European Conference on Computer Vision.

[CVAP161] S. Carlsson, "Relative positioning from model indexing", report, ISRN KTH/NA/P--94/22--SE, Aug. 1994. Also in Image and Vision Computing vol. 12, no. 3, pp. 179-186, Apr. 1994.

[CVAP160] L. Olsson, "Module network tool", in *Experimental Environments for Computer Vision and Image Processing* (H. I. Christensen and J. L. Crowley, eds.), vol. 11 of *Machine Perception Artificial Intelligence*, pp. 225–252, World Scientific, 1994. Also in ISRN KTH/NA/P--94/21--SE, Aug. 1994.

[CVAP159] T. Lindeberg, "On the axiomatic foundations of linear scale-space: Combining semi-group structure with causality vs. scale invariance", report, ISRN KTH/NA/P--94/20--SE, Aug. 1994. Extended

version to appear in J. Sporring and M. Nielsen and L. Florack and P. Johansen (eds.) Gaussian Scale-Space Theory: Proc. PhD School on Scale-Space Theory, Copenhagen, Denmark, Kluwer Academic Publishers, May 1996.

[CVAP158] P. Nordlund, "Localization of a moving object by a moving observer", report, ISRN KTH/NA/P--94/19--SE, June 1994.

[CVAP157] A. Francisco, *Active Structure Acquisition by Continous Fixation Movements*. Doctoral dissertation,, Dept. of Numerical Analysis and Computing Science, KTH (Royal Institute of Technology), June 1994. ISRN KTH/NA/P--94/17--SE.

[CVAP156] T. Lindeberg and B. ter Haar Romeny, "Linear scale-space I: Basic theory II: Early visual operators", report, ISRN KTH/NA/P--94/18--SE, June 1994. In ter Haar Romeny (ed.) *Geometry-Driven Diffusion in Computer Vision*, Kluwer Academic Publishers, Series in Mathematical Imaging and Vision.

[CVAP155] A. Naeve and J.-O. Eklundh, "Generalized cylinders - what are they?", in *Aspects of Visual Form Processing* (C. Arcelli, L.P. Cordella, and G. Sanniti di Baja, eds.), pp. 384–409, World Scientific Press, Singapore, 1994. Also in ISRN KTH/NA/P--94/15--SE.

[CVAP154] K. Okamoto, "An attentional mechanism applied to moving objects", report, ISRN KTH/NA/P--94/14--SE, May 1994.

[CVAP153] M. Andersson, *Tracking Methods in Computer Vision*. Doctoral dissertation,, Dept. of Numerical Analysis and Computing Science, KTH (Royal Institute of Technology), May 1994. ISRN KTH/NA/P--94/13--SE.

[CVAP152] J.-O. Eklundh (Ed.), "The 1993 Stockholm workshop on computational vision", report, ISRN KTH/NA/P--94/12--SE, Apr. 1994.

[CVAP151] H. Tråvén, "A guide to color constancy", report, ISRN KTH/NA/P--94/11--SE, Mar. 1994.

[CVAP150] C. Fermüller and Y. Aloimonos, "On the geometry of visual correspondence", report, ISRN KTH/NA/P--94/10--SE, Feb. 1994.

[CVAP149] C. Fermüller, "Passive navigation as a pattern recognition problem", report, ISRN KTH/NA/P--94/09--SE, Feb. 1994.

[CVAP148] J. Gårding and T. Lindeberg, "Direct estimation of local surface shape in a fixating binocular vision system", report, ISRN KTH/NA/P--94/08--SE, Feb. 1994. Shortened version in Proc. 3rd European Conference on Computer Vision.

[CVAP147] M. Li, "Camera calibration of the KTH head-eye system", report, ISRN KTH/NA/P--94/07--SE, Feb. 1994. Shortened version in Proc. 3rd European Conference on Computer Vision.

[CVAP146] K. Pahlavan, T. Uhlin, and J.-O. Eklundh, “Active vision as methodology”, report, ISRN KTH/NA/P--94/05--SE, Feb. 1994.

[CVAP145] T. Lindeberg, “Scale selection for differential operators”, report, ISRN KTH/NA/P--94/03--SE, Jan. 1994. Extended version in *Int. J. of Computer Vision*, vol 30, number 2, 1998. (In press).

[CVAP144] T. Lindeberg, “Effective scale: A natural unit for measuring scale-space lifetime”, *IEEE Trans. Pattern Analysis and Machine Intell.*, vol. 15, pp. 1068–1074, Oct. 1993. Also ISRN KTH/NA/P--94/01--SE (Jan 1994).

[CVAP143] T. Lindeberg and J. Gårding, “Shape-adapted smoothing in estimation of 3-D depth cues from affine distortions of local 2-D structure”, report, ISRN KTH/NA/P--93/35--SE, Dec. 1993. To appear in Image and Vision Computing. Shortened version also in Proc. 3rd European Conference on Computer Vision.

[CVAP142] J. Gårding, J. Porrill, J.E.W. Mayhew, and J.P. Frisby, “Stereopsis, vertical disparity and relief transformations”, *Vision Research*, vol. 35, no. 5, pp. 703–722, 1995. Also ISRN KTH/NA/P--93/34--SE.

[CVAP141] T. Lindeberg, “Detecting salient blob-like image structures and their scales with a scale-space primal sketch: A method for focus-of-attention”, *International Journal of Computer Vision*, vol. 11, no. 3, pp. 283–318, 1993. Also ISRN KTH/NA/P--93/33--SE.

[CVAP140] A. Francisco, “Continuous principal distance change for binocular depth perception”, report, ISRN KTH/NA/P--93/31--SE, Oct. 1993.

[CVAP139] W. Zhang and F. Bergholm, “Multi-scale blur estimation and edge type classification for scene analysis”, report, ISRN KTH/NA/P--93/30--SE, Oct. 1993.

[CVAP138] K. Brunnström, *Active Exploration of Static Scenes.* Doctoral dissertation,, Dept. of Numerical Analysis and Computing Science, KTH (Royal Institute of Technology), Oct. 1993. ISRN KTH/NA/P--93/29--SE.

[CVAP137] A. Francisco, *Continuous Vergence Movements for Depth Perception.* Licentiate dissertation, Dept. of Numerical Analysis and Computing Science, KTH (Royal Institute of Technology), Sept. 1993. ISRN KTH/NA/P--93/28--SE.

[CVAP136] S. Carlsson, “The double algebra: An effective tool for computing invariants in computer vision”, in *Applications of Invariance in Computer Vision: Proc. 2nd Joint European–US Workshop, Azores, Portugal, Oct. 1993* (J.L. Mundy, A. Zisserman,

and D. Forsyth, eds.), vol. 825 of *Lecture Notes in Computer Science*, pp. 145–164, Springer Verlag, Berlin, 1994. Also in ISRN KTH/NA/P--93/27--SE, Sep. 1993.

[CVAP135] A. Francisco and F. Bergholm, "On the importance of being asymmetric in stereopsis - or why we should use skewed parallel cameras", report, ISRN KTH/NA/P--93/26--SE, July 1993.

[CVAP134] A. Francisco, T. Uhlin, and J.-O. Eklundh, "Continuous vergence movements for relative depth acquisition", in *Proc. 8th Scandinavian Conference on Image Analysis* (K. A. Høgdra, B. Braathen, and K. Heia, eds.), (Tromsø, Norway), pp. 97–104, Norwegian Society for Image Processing and Pattern Recognition, May 1993. Also ISRN KTH/NA/P--93/23--SE.

[CVAP133] M. Andersson and P. Nordlund, "Modeling, matching and tracking for the Stereovision II project", report, ISRN KTH/NA/P--93/22--SE, June 1993.

[CVAP132] M. Andersson, P. Nordlund, and J.-O. Eklundh, "Modeling, matching and tracking for the Stereovision II project: State-of-the-Art review", report, ISRN KTH/NA/P--93/21--SE, June 1993.

[CVAP131] J. Philip, "A noniterative algorithm for determining all essential matrices corresponding to five point pairs", report, ISRN KTH/NA/P--93/20--SE, June 1993.

[CVAP130] A. Naeve, *Focal Shape Geometry of Surfaces in Euclidean Space*. Doctoral dissertation,, Dept. of Numerical Analysis and Computing Science, KTH (Royal Institute of Technology), May 1993. ISRN KTH/NA/P--93/19--SE.

[CVAP129] A. Maki, "Phase-based disparity estimation in binocular vergence", report, ISRN KTH/NA/P--93/17--SE, May 1993. An extended version published as a Master's Thesis at the University of Tokyo.

[CVAP128] K. Pahlavan, *Active Robot Vision and Primary Ocular Processes*. Doctoral dissertation,, Dept. of Numerical Analysis and Computing Science, KTH (Royal Institute of Technology), May 1993. ISRN KTH/NA/P--93/16--SE.

[CVAP127] H. Winroth, "Exception handling in ANSI C", report, ISRN KTH/NA/P--93/15--SE, Apr. 1993. Shortened version in C Users Journal, Oct. 1993, vol. 11, no. 10, pp. 33–46.

[CVAP126] H. Winroth, "Object-oriented communication in image processing systems", report, ISRN KTH/NA/P--93/14--SE, Apr. 1993. Also in Object-Oriented Communication in Image Processing Systems, World Scientific, 1994.

[CVAP125] L. Olsson and H. Winroth, "Object-oriented computational networks for computer vision applications", in *TOOLS 10* (B. Magnusson, B. Meyer, and J.-F. Perrot, eds.), (Versailles, France), pp. 223–233, Prentice Hall, Mar. 1993. Also ISRN KTH/NA/P--93/13--SE.

[CVAP124] T. Lindeberg, "On scale selection for differential operators", in *Proc. 8th Scandinavian Conference on Image Analysis* (K. A. Høgdra, B. Braathen, and K. Heia, eds.), (Tromsø, Norway), pp. 857–866, Norwegian Society for Image Processing and Pattern Recognition, May 1993. Also ISRN KTH/NA/P--93/12--SE.

[CVAP123] K. Brunnström, J.-O. Eklundh, and Tomas Uhlin, "Active fixation for scene exploration", report, ISRN KTH/NA/P--93/11--SE, Mar. 1993. Shortened version in Proc. British Machine Vision Conference 1993. Also International Journal of Computer Vision.

[CVAP122] L. Svensson, "On the use of the double algebra in computer vision", report, ISRN KTH/NA/P--93/10--SE, Mar. 1993.

[CVAP121] S. Carlsson, A. Francisco, M. Li, T. Lindeberg, J. Gårding, K. Pahlavan, T. Uhlin, J.-O. Eklundh, W. Zhang, and F. Bergholm, "Contributions to the 4th International Conference on Computer Vision", report, ISRN KTH/NA/P--93/08--SE, Mar. 1993.

[CVAP120] T. Lindeberg, "Scale-space: A basis for early vision", report, ISRN KTH/NA/P--93/07--SE, Mar. 1993. *J. of Applied Statistics ADDRESS = kthaddress/* 21(2), pp. 224–270, 1994. Supplement on *Advances in Applied Statistics: Statistics and Images: 2*.

[CVAP119] W. Leister, F. Bergholm, and G. W. Bieberich, "Photorealistic sequence as ground truth for image analysis experiments", report, ISRN KTH/NA/P--92/37--SE, Feb. 1993.

[CVAP118] K. Pahlavan, T. Uhlin, and J.-O. Eklundh, "Dynamic fixation and active perception", report, ISRN KTH/NA/P--93/05--SE, Feb. 1993. Shortened version in Proc. 4th International Conference on Computer Vision.

[CVAP117] J. Gårding and T. Lindeberg, "Direct computation of shape cues using scale-adapted spatial derivative operators", *International Journal of Computer Vision*, vol. 17, no. 2, pp. 163–191, 1996. Also ISRN KTH/NA/P--93/04--SE (Feb. 1993; updated Dec. 1994).

[CVAP116] T. Lindeberg and J. Gårding, "Shape from texture from a multi-scale perspective", in *Proc. 4th International Conference on Computer Vision* (H-H. Nagel, ed.), (Berlin, Germany), pp. 683–691, IEEE Computer Society Press, May 1993. Longer version in ISRN KTH/NA/P--93/03--SE (Jan. 93).

[CVAP115] K. Brunnström and J.-O. Eklundh, "Active fixation for junction classification", report, ISRN KTH/NA/P--92/35--SE, Nov. 1992. Also in Proc. CAIP'9, ADDRESS = kthaddress3, Budapest, Hungary, Sep. 13-15, 1993.

[CVAP114] M. Li, "Minimum description length based 2-d shape description", report, ISRN KTH/NA/P--92/34--SE, Nov. 1992. Shortened version in Proc. 4th International Conference on Computer Vision.

[CVAP113] A. Francisco, "Relative depth from vergence micromovements", report, ISRN KTH/NA/P--92/33--SE, Oct. 1992. Shortened version in Proc. 4th International Conference on Computer Vision.

[CVAP112] S. Carlsson, "Projectively invariant decomposition and recognition of planar shapes", report ISRN KTH/NA/P--92/31--SE, Oct. 1992. Shortened version in Proc. 4th International Conference on Computer Vision.

[CVAP111] T. Lindeberg and L. Florack, "On the decrease of resolution as a function of eccentricity for a foveal vision system", report, ISRN KTH/NA/P--92/29--SE, Oct. 1992.

[CVAP110] A. Francisco, "Vergence micromovements and depth perception", report, ISRN KTH/NA/P--92/26--SE, Oct. 1992.

[CVAP109] T. Lindeberg, "Contribution to workshop 'Shape in Picture' ", in *Shape in Picture: Mathematical Description of Shape in Grey-Level Images* (Y. O. Ying, A. Toet, D. Foster, H. Heijmanns, and P. Meer, eds.), vol. 126 of *NATO ASI Series F*, pp. 571–600, Springer Verlag, Berlin, 1994. Also ISRN KTH/NA/P--92/26--SE (Sep. 92; Revised Apr. 94).

[CVAP108] J. Gårding, "Direct estimation of shape from texture", *IEEE Trans. Pattern Analysis and Machine Intell.*, vol. 15, pp. 1202–1208, Nov. 1993. Also ISRN KTH/NA/P--92/24--SE.

[CVAP107] T. Lindeberg, "Scale-space behaviour of local extrema and blobs", *J. of Mathematical Imaging and Vision*, vol. 1, pp. 65–99, 1992. Also ISRN KTH/NA/P--92/19--SE.

[CVAP106] A. Horii, "Depth from defocusing", report, ISRN KTH/NA/P--92/16--SE, June 1992.

[CVAP105] A. Horii, "The focusing mechanism in the KTH head-eye system", report, ISRN KTH/NA/P--92/15--SE, June 1992.

[CVAP104] W. Zhang and F. Bergholm, "An extension of Marr's "signature" based edge classification", report, ISRN KTH/NA/P--92/14--SE, May 1992.

[CVAP103] T. Lindeberg, "Discrete derivative approximations with scale-space properties: A basis for low-level feature extraction", *J. of Mathematical Imaging and Vision*, vol. 3, no. 4, pp. 349–376, 1993. Also ISRN KTH/NA/P--92/12--SE (Apr. 92; Revised Mar. 93).

[CVAP102] J.-O. Eklundh (Ed.), "The 1991 Stockholm Workshop on Computational Vision", report, ISRN KTH/NA/P--92/10--SE, 1992.

[CVAP101] K. Pahlavan, T. Uhlin, and J.-O. Eklundh, "Integrating primary ocular processes", *Image and Vision Computing*, vol. 10, pp. 645–662, Dec. 1992. Also ISRN KTH/NA/P--92/09--SE. Shortened version in Proc. 2nd European Conference on Computer Vision.

[CVAP100] K. Pahlavan and J.-O. Eklundh, "A head-eye system — Analysis and design", *Computer Vision, Graphics, and Image Processing:Image Understanding*, vol. 56, no. 1, pp. 41–56, 1992. Also ISRN KTH/NA/P--92/08--SE.

[CVAP99] J.-O. Eklundh, J.Gårding, T. Lindeberg, and F. Bergholm, "Extraction of shape features and experiments on cue integration", in *Artificial and Biological Vision Systems* (G. Orban and H. H. Nagel, eds.), pp. 350–379, Springer Verlag, Berlin, 1992. Also ISRN KTH/NA/P--92/04--SE.

[CVAP98] J. Gårding, "Shape from texture for smooth curved surfaces in perspective projection", *J. of Mathematical Imaging and Vision*, vol. 2, pp. 329–352, 1992. Also ISRN KTH/NA/P--92/03--SE. Shortened version in Proc. 2nd European Conference on Computer Vision.

[CVAP97] K. Brunnström, T. Lindeberg, and J.-O. Eklundh, "Active detection and classification of junctions by foveation with a head-eye system guided by the scale-space primal sketch", in *Proc. 2nd European Conference on Computer Vision* (G. Sandini, ed.), vol. 588 of *Lecture Notes in Computer Science*, (Santa Margherita Ligure, Italy), pp. 701–709, Springer Verlag, Berlin, May 1992. Longer version in ISRN KTH/NA/P--91/31--SE (Nov. 93).

[CVAP96] H. Winroth, "External object representation", report, ISRN KTH/NA/P--91/28--SE, Nov. 1991.

[CVAP95] H. Winroth, "Optic reference manual", report, ISRN KTH/NA/P--91/27--SE, Nov. 1991.

[CVAP94] J. Philip, "A fast and stable deconvolution algorithm", report, ISRN KTH/NA/P--91/25--SE, Oct. 1991.

[CVAP93] P. Lodola, J.-O. Eklundh, M. Andersson, and M. Berthod, "Stereovision and motion for advanced space robotics", in *Proc. First ESA Workshop on Computer Vision and Image Processing for Spaceborne Applications*, (Noordwijk, Netherlands), June 1991. Also ISRN KTH/NA/P--91/24--SE.

[CVAP92] T. Lindeberg, "Two-dimensional discrete scale-space formulation", report, ISRN KTH/NA/P--91/23--SE, Aug. 1991.

[CVAP91] M. Andersson *et al.*, "Contributions to 7th SCIA", report, ISRN KTH/NA/P--91/22--SE, 1991. (M. Andersson and A. Lundquist: Tracking lines in a stereo image sequence, 88–97. S. Carlsson: Recursive estimation of ego-motion and scene structure from a moving platform, 958–965. T. Lindeberg: On the behaviour in scale-space of local extrema and blobs, 8–17. W. Zhang and F. Bergholm: An extension of , ADDRESS = kthaddressMarr's "signature" based edge classification, 435–443).

[CVAP90] S. Carlsson, "Projectively invariant decomposition of planar shapes", in *Geometric Invariance in Computer Vision* (J. Mundy and A. Zisserman, eds.), MIT Press, 1992. Also ISRN KTH/NA/P--91/21--SE.

[CVAP89] J.-O. Eklundh, T. Lindeberg, and H. Winroth, "Qualitative shape – some computational aspects", in *Visual Form* (C. Arcelli, L. P. Cordella, and G. Sanniti di Baja, eds.), pp. 231–248, Plenum Press, New York, 1992. (Proc. Int. Workshop on Visual Form, Capri, Italy, May 1991). Also ISRN KTH/NA/P--91/20--SE.

[CVAP88] M. Andersson and D. Betsis, "Stereo reconstruction from point and line correspondences", report, ISRN KTH/NA/P--91/17--SE, Oct. 1991.

[CVAP87] M. Andersson and A. Lundquist, "Tracking lines in a stereo image sequence", report, ISRN KTH/NA/P--91/16--SE, Aug. 1991. Shortened versions also in Proc. First ESA Workshop on Computer Vision and Image Processing for Spaceborne Applications, and Proc. 7th Scandinavian Conference on Image Analysis.

[CVAP86] K. Chinzei, "Establishing plane hypotheses based on coplanarity and connectivity of 3D contours", report, ISRN KTH/NA/P--91/11--SE, 1991.

[CVAP85] J. Gårding, *Shape from Surface Markings.* Doctoral dissertation,, Dept. of Numerical Analysis and Computing Science, KTH (Royal Institute of Technology), May 1991. ISRN KTH/NA/P--91/10--SE.

[CVAP84] T. Lindeberg, *Discrete Scale-Space Theory and the Scale-Space Primal Sketch.* Doctoral dissertation,, Dept. of Numerical Analysis and Computing Science, KTH (Royal Institute of Technology), May 1991. ISRN KTH/NA/P--91/08--SE. An extended and revised version published as book "Scale-Space Theory in Computer Vision" in The Kluwer International Series in Engineering and Computer Science.

[CVAP83] F. Bergholm and K. Rohr, “A comparison between two approaches applied for estimating diffuseness and height of step edges”, report, ISRN KTH/NA/P--91/05--SE, 1991. Also Hausbericht, Fraunhofer-Institut f¿ ADDRESS = kthaddressur Informations- und Datenverarbeitung, Nr. 10262, Karlsruhe.

[CVAP82] A. Lundquist, “Tracking lines using a rigid motion assumption”, report, ISRN KTH/NA/P--91/04--SE, 1991.

[CVAP81] K. Chinzei, “Merging broken lines and locating imprecise intersection points of 2D line segments”, report, ISRN KTH/NA/P--91/02--SE, 1991.

[CVAP80] K. Pahlavan and J.-O. Eklundh, “A head-eye system for active, purposive computer vision”, report, ISRN KTH/NA/P--90/31--SE, 1990.

[CVAP79] J. Philip, “Motion parameters from right angles”, *J. of Mathematical Imaging and Vision*, vol. 1, no. 2, pp. 107–120, 1992. Also ISRN KTH/NA/P--90/29--SE.

[CVAP78] J.-O. Eklundh, “Information integration and model selection”, in *Proc. NATO Advanced Research Workshop on Multisensor Fusion in Computer Vision*, (Grenoble), June 1989. Also ISRN KTH/NA/P--90/25--SE.

[CVAP77] F. Bergholm and S. Carlsson, “A “theory” of optical flow”, *Computer Vision, Graphics, and Image Processing:Image Understanding*, vol. 53, pp. 171–188, Mar. 1991.

[CVAP76] A. Bengtsson and J.-O. Eklundh, “Shape representation by multiscale contour approximation”, *IEEE Trans. Pattern Analysis and Machine Intell.*, vol. 13, pp. 85–94, Jan. 1991.

[CVAP75] K. Brunnström, J.-O. Eklundh, and T. Lindeberg, “On scale and resolution in active analysis of local image structure”, *Image and Vision Computing*, vol. 8, pp. 289–296, Nov. 1990. Also ISRN KTH/NA/P--90/24--SE.

[CVAP74] F. Bergholm, “Decomposition theory and transformations of visual directions”, report, ISRN KTH/NA/P--90/23--SE, 1990. Also in Proc. 3rd International Conference on Computer Vision.

[CVAP73] S. Takahashi, “Edge tracing to detect contours for higher level processing”, report, ISRN KTH/NA/P--90/16--SE, 1990.

[CVAP72] T. Lindeberg and J.-O. Eklundh, “Guiding early visual processing with a scale-space primal sketch”, report, ISRN KTH/NA/P--90/13--SE, 1990. Shortened version in Proc. 3rd International Conference on Computer Vision.

[CVAP71] J. Gårding, "Shape from texture and contour by weak isotropy", *Artificial Intelligence*, vol. 64, pp. 243–297, Dec. 1993. Also ISRN KTH/NA/P--90/12--SE. Shortened version in Proc. 10th International Conference on Pattern Recognition.

[CVAP70] S. Carlsson and J.-O. Eklundh, "Object detection using model based prediction and motion parallax", in *Proc. 1st European Conference on Computer Vision* (O. Faugeras, ed.), vol. 427 of *Lecture Notes in Computer Science*, pp. 297–306, Springer Verlag, Berlin, Apr. 1990. Also in Vision Based Vehicle Guidance (I. Masaki, ed.), Springer-Verlag, 1991. Also ISRN KTH/NA/P--90/07--SE.

[CVAP69] K. Brunnström, J.-O. Eklundh, and T. Lindeberg, "On scale and resolution in the analysis of local image structure", in *Proc. 1st European Conference on Computer Vision* (O. Faugeras, ed.), vol. 427 of *Lecture Notes in Computer Science*, pp. 3–12, Springer Verlag, Berlin, Apr. 1990. (Antibes, France). Also ISRN KTH/NA/P--90/06--SE.

[CVAP68] T. Lindeberg and J.-O. Eklundh, "On the computation of a scale-space primal sketch", *Journal of Visual Communication and Image Representation*, vol. 2, pp. 55–78, Mar. 1991. Also ISRN KTH/NA/P--90/05--SE. Shortened version in Proc. BMVC90, and an extended version in Image and Vision Computing.

[CVAP67] K. Brunnström, J.-O. Eklundh, and A. Kakimoto, "On focus-of-attention by active focusing", report, ISRN KTH/NA/P--90/04--SE, 1990. Also in Proc. NATO ASI on Active Perception and Robot Vision, Maratea, July 1989Springer Verlag, Berlin.

[CVAP66] T. Lindeberg, "Scale-space for discrete signals", *IEEE Trans. Pattern Analysis and Machine Intell.*, vol. 12, pp. 234–254, 1990.

[CVAP65] J.-O. Eklundh (ed.), "The 1989 Stockholm Workshop on Computational Vision", report, ISRN KTH/NA/P--90/01--SE, 1990.

[CVAP64] T. Lindeberg and J.-O. Eklundh, "Analysis of aerosol images using the scale-space primal sketch", *Machine Vision and Applications*, vol. 4, pp. 135–144, Aug. 1991. Also ISRN KTH/NA/P--89/20--SE.

[CVAP63] A. Naeve, "Geometric modelling – a projective approach", report, ISRN KTH/NA/P--89/18--SE, 1989.

[CVAP62] J. Philip, "Motion parameters from an occluded rectangle", report, ISRN KTH/NA/P--89/15--SE, 1989.

[CVAP61] M. Andersson *et al.*, "Contributions to 6th SCIA", report, ISRN KTH/NA/P--89/05--SE, 1989. (M. Andersson, J.-O. Eklundh, A. Kakimoto: Rigid body motion analysis from the correspondence of interest points, 786-791. A. Bengtsson, J.-O. Eklundh: Shape representation by multi-scale contour approximation, 252-261. F. Bergholm: Classification of edges in time-varying imagery, 552-560. J. Gårding: Estimating the orientation of multiple textured planes, 228-236. T. Lindeberg: Scale space for discrete images, 1098-1107. H. Tråvén: A neural network clustering algorithm, and its application to multispectral satellite image classification, 128-135.).

[CVAP60] F. Bergholm, *On the Content of Information in Edges and Optical Flow.* Doctoral dissertation,, Dept. of Numerical Analysis and Computing Science, KTH (Royal Institute of Technology), May 1989. ISRN KTH/NA/P--89/04--SE.

[CVAP59] J. Philip, "Estimation of three-dimensional motion of rigid objects from noisy observations", *IEEE Trans. Pattern Analysis and Machine Intell.*, vol. 13, pp. 61–66, Jan. 1991. Also ISRN KTH/NA/P--89/02--SE.

[CVAP58] F. Bergholm, "A theory of optical flow", article, ISRN KTH/NA/P--88/10--SE, 1988. Also in Proc. 2nd International Conference on Computer Vision.

[CVAP57] K. Brunnström, J.-O. Eklundh, and G. Olofsson, "Hypotheses of geometric structure generated in an active vision system", in *Proc. IAPR Workshop on Computer Vision*, pp. 62–65, IEEE Computer Society Press, 1988.

[CVAP56] A. Kakimoto, "A stereo approach for determining view direction in an active vision system", report, ISRN KTH/NA/P--88/09--SE, 1988.

[CVAP55] T. Lindeberg, "On the construction of a scale-space for discrete images", report, ISRN KTH/NA/P--88/08--SE, 1988.

[CVAP54] A. M. Waxman, J. Wu, and F. Bergholm, "Convected activation profiles and the measurement of visual motion", in *Proc. IEEE Comp. Soc. Conf. on Computer Vision and Pattern Recognition*, (Ann Arbor, Mi.), pp. 717–723, June 1988.

[CVAP53] A. Kakimoto, "An algorithm for finding interest points", report, ISRN KTH/NA/P--88/07--SE, 1988.

[CVAP52] Ö. Ekeberg and B. Levin, "Reserapport från Euro'88", report, ISRN KTH/NA/P--88/06--SE, 1988.

[CVAP51] C. Orbert, "Shape from shading – a pilot study", report, ISRN KTH/NA/P--88/03--SE, 1988.

[CVAP50] H . Tråvén, "Temporal associative memory", report, ISRN KTH/NA/P--88/02--SE, 1988.

[CVAP49] J. Gårding, "Properties of fractal intensity surfaces", *Pattern Recognition Letters*, vol. 8, pp. 319–324, Dec. 1988. Also ISRN KTH/NA/P--87/16--SE.

[CVAP48] F. Bergholm and S. Carlsson, "Global structure of velocity fields and the aperture problem in the large", report, ISRN KTH/NA/P--87/15--SE, 1987.

[CVAP47] J.-O. Eklundh (ed.), "The 1987 Stockholm Workshop on Computational Vision", report, ISRN KTH/NA/P--87/14--SE, 1987.

[CVAP46] A. Kakimoto, "Testbed for goal directed computer vision", report, ISRN KTH/NA/P--87/12--SE, 1987.

[CVAP45] Ö. Ekeberg and A. Lansner, "Reserapport från IEEE First Annual International Conference on Neural Networks (ICNN-1987)", report, ISRN KTH/NA/P--87/11--SE, 1987.

[CVAP44] A. M. Waxman and F. Bergholm, "Convected activation profiles and image flow extraction", report, ISRN KTH/NA/P--87/10--SE, Aug. 1987. Also in LSR-Tech-Rep-4, Boston University, Ma.

[CVAP43] S. Chang, L. S. Davis, S. M. Dunn, A. Rosenfeld, and J.-O. Eklundh, "Texture discrimination by projective invariants", *Pattern Recognition Letters*, vol. 5, pp. 337–342, May 1987.

[CVAP42] L. Svensson and A. Naeve, "Estimating the N-dimensional motion of an (N-1)-dimensional hyperplane from two matched images of N+1 points", in *Proc. 5th Scandinavian Conference on Image Analysis*, (Stockholm), pp. 605–622, June 1987. Also ISRN KTH/NA/P--87/08--SE.

[CVAP41] F. Bergholm, "Motion from flow along contours – a note on robustness and ambiguous cases", *International Journal of Computer Vision*, vol. 2, no. 4, pp. 395–415, 1988. Also ISRN KTH/NA/P--87/07--SE.

[CVAP40] F. Sjöberg and F. Bergholm, "Extraction of diffuse edges by edge focusing", *Pattern Recognition Letters*, vol. 7, pp. 181–190, Mar. 1988. Also ISRN KTH/NA/P--87/05--SE.

[CVAP39] Ö. Ekeberg, "Lucia – User's manual", report, ISRN KTH/NA/P--87/04--SE, 1987.

[CVAP38] Ö. Ekeberg and A. Lansner, "Associative networks: I A Bayesian learning rule. II Complex nodes", in *Proc. Seventh Int. Congress of Cybernetics and Systems*, (London), Sept. 1987. Also ISRN KTH/NA/P--87/03--SE.

[CVAP37] Ö. Ekeberg and A. Lansner., "An associative network solving the 4-bit adder problem", in *Proc. IEEE First Annual International*

Conference on Neural Networks (vol II), (San Diego, Ca.), Jan. 1987.

[CVAP36] G. Olofsson, "Experiments with an algorithm for line extraction", report, TRITA-NA-E8682, Oct. 1986.

[CVAP35] J.-O. Eklundh *et al.*, "The CVAP project – Progress report 1985", report, TRITA-NA-8605, Oct. 1986.

[CVAP34] A. Lansner, *Investigations into the Pattern Processing Capabilities of Associative Nets.* Doctoral dissertation,, Dept. of Numerical Analysis and Computing Science, KTH (Royal Institute of Technology), Feb. 1986. TRITA-NA-8601.

[CVAP33] J. Gårding, "On the determination of surface orientation from texture", report, TRITA-NA-E8570, Dec. 1985.

[CVAP32] F. Sjöberg, "Laplace pyramids – experiments with a multiresolution image representation", report, TRITA-NA-E8569, Dec. 1985.

[CVAP31] H. Becker, "The determination of the curvature of noisy planar curves", report, TRITA-NA-E8568, Dec. 1985.

[CVAP30] A. Naeve, "On the use of Grassman algebra in image analysis", report, ISRN KTH/NA/P--87/09--SE, 1987.

[CVAP29] A. Naeve, "Projective line geometry of the visual operator", report, TRITA-NA-8606, Dec. 1986.

[CVAP28] A. Naeve and J.-O. Eklundh, "On projective geometry and the recovery of 3-D structure", in *Proc. 1st International Conference on Computer Vision*, (London), pp. 128–135, June 1987. Also TRITA-NA-8608, December 1986.

[CVAP27] A. Bengtsson, J.-O. Eklundh, and J. Howako, "Shape representation by multiscale contour approximation", report, TRITA-NA-8607, Dec. 1986.

[CVAP26] Ö. Ekeberg, "Robust dictionary lookup using associative networks", *International Journal of Man-Machine Studies*, vol. 28, pp. 29–43, 1988. Also TRITA-NA-852 (December 1985).

[CVAP25] J.-O. Eklundh, A. Lansner, and R. Wessblad, "Classification of multispectral images using associative nets", in *Proc. 8th International Conference on Pattern Recognition*, (Paris), pp. 1240–1243, IEEE Computer Society Press, Oct. 1986. Also TRITA-NA-8519.

[CVAP24] F. Bergholm, "Edge focusing", *IEEE Trans. Pattern Analysis and Machine Intell.*, vol. 9, pp. 726–741, Nov. 1987. Also TRITA-NA-8518 (December 1985), and a shortened version in Proc. 8th International Conference on Pattern Recognition.

[CVAP23] A. Lansner, “Prototype extraction and matching in associative nets”, report, TRITA-NA-8516, Nov. 1985.

[CVAP22] F. Bergholm, J.-O. Eklundh, and J. Howako, “Finding geometric structure”, in *Proc. 4th Scandinavian Conference on Image Analysis*, (Trondheim), pp. 753–760, June 1985. Also Tech. Report Integral 40.

[CVAP21] A. Lansner, “Pattern processing in a multilayer associative net”, in *Proc. 4th Scandinavian Conference on Image Analysis*, (Trondheim), pp. 831–838, June 1985. Also Tech. Report Integral 39.

[CVAP20] J.-O. Eklundh *et al.*, “The CVAP project – Progress report 1984”, report, TRITA-NA-8509 (Integral 43), June 1985.

[CVAP19] A. Lansner, “Associative processing in brain theory and artificial intelligence”, in *Brain Theory, Proc. First Trieste Meeting on Brain Theory* (Palm and Aertsen, eds.), Oct. 1984. Also TRITA-NA-8508 (Integral 37).

[CVAP18] H. Marmolin, “Approximation errors and perceived similarity between approximated polygons”, report, TRITA-NA-8503 (Integral 35), Feb. 1985.

[CVAP17] J.-O. Eklundh and L. Kjelldahl, “Computer graphics and computer vision – some unifying and discriminating features”, *Computers and Graphics*, vol. 9, no. 4, pp. 339–349, 1985. Also Tech. Report Integral 32.

[CVAP16] F. Bergholm, “Detection of edges and busy regions using Canny’s edge detector”, report, TRITA-NA-E8472 (Integral 28), Nov. 1984.

[CVAP15] M. H. Movahedi, *Applying Logic Programming to Region-Based Scene Interpretation*. Licentiat thesis, Dept. of Numerical Analysis and Computing Science, KTH (Royal Institute of Technology), Sept. 1984.

[CVAP14] J.-O. Eklundh and J. Howako, “Robust shape description based on curve fitting”, in *Proc. 7th International Conference on Pattern Recognition*, (Montreal), pp. 109–112, IEEE Computer Society Press, July 1984. Also Tech. Report Integral 22.

[CVAP13] A. Lansner and Ö. Ekeberg, “Reliability and speed of recall in an associative network”, *IEEE Trans. Pattern Analysis and Machine Intell.*, pp. 490–498, July 1985. Also TRITA-NA-8408 (Integral 18).

[CVAP12] L. Sandström, “Ett associativt nätverk för analys av teckensträngar”, report, TRITA-NA-E8454 (Integral 16), 1984.

[CVAP11] J.-O. Eklundh *et al.*, “The INTEGRAL project – Progress report 1983”, report, TRITA-NA-8405 (Integral 15), 1984.

[CVAP10] A. Lansner, “Pattern recognition in an adaptive associative network”, in *Proc of the First ESSCS Workshop on Cognitive Systems*, (Nordwijkerhout, Holland), 1983. Also Tech. Report Integral 13.

[CVAP9] T. Bergman, “Analys av streckbilder med associativa nät”, report, TRITA-NA-E8365 (Integral 12), Dec. 1983.

[CVAP8] J.-O. Eklundh (ed.), “The 1983 Stockholm Workshop on Computational Vision”, report, TRITA-NA-E8362 (Integral 11), 1983.

[CVAP7] J.-O. Eklundh, “A structured approach to segmentation of aerial photographs”, *Applications of Digital Image Processing, Proc. SPIE*, vol. 397, pp. 21–27, Apr. 1983. Also Tech. Report Integral 10.

[CVAP6] J.-O. Eklundh *et al.*, “The INTEGRAL project – Progress report 1982”, report, TRITA-NA-8304 (Integral 8), Jan. 1983.

[CVAP5] A. Lansner and Ö. Ekeberg, “A program package implementing a system of interacting adaptive associative networks”, report, TRITA-NA-8302 (Integral 6), Feb. 1983.

[CVAP4] J.-O. Eklundh, L. Kjelldahl, and Y. Sundblad, “Image analysis, computer graphics and text processing in USA – report from a tour in april 1982”, report, TRITA-NA-8221 (Integral 4), Dec. 1982.

[CVAP3] A. Lansner, “Information processing in a network of neurons: A computer simulation study”, report, TRITA-NA-8211 (Integral 3), June 1982.

[CVAP2] J.-O. Eklundh, “Knowledge based image analysis”, report, TRITA-NA-8206 (Integral 2), Mar. 1982.

[CVAP1] J.-O. Eklundh *et al.*, “Integrated text, image and graphics laboratory”, report, TRITA-NA-8204 (Integral 1), Mar. 1982.

Technical notes

[TN18] F. Bergholm, “Tools for color, illumination and motion analysis in computer vision - an introduction”, Tech. Note CVAP-TN18, Aug. 1997.

[TN17] F. Bergholm and M. Andersson, “Summary of project cts 94:40, robust stereo for robotics”, Tech. Note CVAP-TN17, Mar. 1997.

[TN16] M. Li, “CAMCAL - a camera calibration package user manual and programming reference”, Tech. Note CVAP-TN16, Dec. 1996.

[TN15] T. Lindeberg, “Scale-space theory: A framework for handling image structures at multiple scales”, in *Proc. CERN School of Computing*, (Egmond aan Zee, The Netherlands), Aug. 1996. CVAP-TN15.

[TN14] A. Maki, J. Gårding, and J.-O. Eklundh, "2-d phase-based ground plane obstacle detection", Tech. Note CVAP-TN14, July 1994. Also in Proc. The 33rd SICE (Society of Instrument and Control Engineers) Annual Conference: SICE,Tokyo, Japan.

[TN13] D. Holmen, "The PMF stereo correspondence algorithm using adaptive support zone", Tech. Note CVAP-TN13, Oct. 1993.

[TN12] M. Andersson and P. Nordlund, "Modeling, matching and tracking for the Stereovision II project: Program description", Tech. Note CVAP-TN12, June 1993.

[TN11] L. Olsson and J.-O. Eklundh, "Module Network Tool", Tech. Note CVAP-TN11, Apr. 1993.

[TN10] A. Orebäck, "Model-based object tracking in real time", Tech. Note CVAP-TN10, Apr. 1993.

[TN09] F. Bergholm, "The Hax Library", Tech. Note CVAP-TN09, Nov. 1991.

[TN08] F. Bergholm, "Reserapport från Karlsruhe", Tech. Note CVAP-TN08, Jan. 1991.

[TN07] M. Rendahl, J. Gårding, and T. Lindeberg, "Candela – an overview", Tech. Note CVAP-TN07, Oct. 1990. (Also in Proc. Aalborg University Vision Workshop, Nov 22, 1990).

[TN06] P. Nordlund, "Comments on David Lowe's "view-package"", Tech. Note CVAP-TN06, 1990.

[TN05] P. Nordlund, "How to make an image sequence on the Symbolics machine", Tech. Note CVAP-TN05, 1990.

[TN04] W. Zhang and F. Bergholm, "An extension of Marr's "signature" based edge classification", Tech. Note CVAP-TN04, Sept. 1990.

[TN03] T. Lindeberg and R. Weiss, "Some thoughts about curves, surfaces and singularity theory", Tech. Note CVAP-TN03, May 1990.

[TN02] J. Gårding and T. Lindeberg, "CanApp – the Candela application library", Tech. Note CVAP-TN02, Nov. 1989.

[TN01] T. Lindeberg and J.-O. Eklundh, "Analysis of aerosol images using the scale-space representation", Tech. Note CVAP-TN01, May 1989.

Journal articles

E. Hayman, T. Thrhallsson, and D. W. Murray, "Tracking while zooming using affine transfer and multifocal tensors", *International Journal of Computer Vision*, vol. 51, pp. 37–62, Jan. 2003.

E. Hayman and D. W. Murray, "The effects of translational misalignment when self-calibrating rotating and zooming cameras", *IEEE Transactions on Pattern Analysis and Machine Intelligence*, vol. 25, pp. 1015–1020, Aug. 2003.

P. Althaus and H. I. Christensen, "Smooth task switching through behaviour competition", *Robotics and Autonomous Systems*, vol. 44, no. 3-4, pp. 241–249, 2003.

P. Althaus and H. I. Christensen, "Behavior coordination in structured environments", *Advanced Robotics*, vol. 17, no. 7, pp. 657–674, 2003.

I. Laptev and T. Lindeberg, "Velocity-adapted spatio-temporal receptive fields for direct recognition of activities", *Image and Vision Computing*, vol. 22, no. 2, pp. 105–116, 2004.

I. Laptev and T. Lindeberg, "A distance measure and a feature likelihood map concept for scale-invariant model matching", *International Journal of Computer Vision*, vol. 52, pp. 97–120, 2003.

A. Orebäck and H. I. Christensen, "Evaluation of architectures for mobile robotics", *Autonomous Robots*, vol. 14, pp. 33–49, January 2003. Kluwer Academic Publishers.

C. Rother, "A new approach to vanishing point detection in architectural environments", *Image and Vision Computing*, vol. 20, no. 9-10, pp. 647–656, 2002.

C. Rother and S. Carlsson, "Linear multi view reconstruction and camera recovery using a reference plane", *International Journal of Computer Vision*, vol. 49, no. 2/3, pp. 117–141, 2002.

L. Petersson D. Kragic and H. I. Christensen, "Visually guided manipulation tasks", *Robotics and Autonomous Systems*, vol. 40, pp. 193–203, August 2002.

M. Björkman and J.-O. Eklundh, "Real-time epipolar geometry estimation of binocular stereo heads", *IEEE Trans. Pattern Analysis and Machine Intell.*, 2001. to appear.

P. Roland, G. Svensson, T. Lindeberg, T. Risch, P. Baumann, A. Dehmel, J. Fredriksson, H. Halldorsson, L. Forsberg, J. Young, and K. Zilles, "A database generator for human brain imaging", *Trends in Neuroscience*, vol. 24, pp. 562–564, October 2001.

O. Cordon, F. Herrera, F. Hoffmann, and L. Magdalena, "Recent advances in genetic fuzzy systems", *Journal of Information Sciences*, vol. 136, pp. 1–5, August 2001.

F. Hoffmann and O. Nelles, "Genetic programming for model selection of tsk-fuzzy systems", *Journal of Information Sciences*, vol. 136, pp. 7–28, August 2001.

F. Hoffmann, "Evolutionary algorithms for fuzzy control system design", *Proceeedings of the IEEE*, vol. 89, September 2001.

P. Jensfelt and H. I. Christensen, "Pose tracking using laser scanning and minimalistic environmental models", *IEEE Transactions on Robotics and Automation*, vol. 17, no. 2, pp. 138–147, 2001.

M. Rosbacke, P. E. Roland, and T. Lindeberg, “Evaluation of using absolute vs. relative base level when analyzing brain activation images using the scale-space primal sketch”, *Journal of Medical Image Analysis*, vol. 5, Issue 2, pp. 89–110, 2001.

D. Kragic and H. I. Christensen, “Cue integration for visual servoing”, *IEEE Transactions on Robotics and Automation*, vol. 17, no. 1, pp. 18–27, 2001.

O. Wijk and H. I. Christensen, “Triangulation based fusion of sonar data with application in robot pose tracking”, *IEEE Transactions on Robotics and Automation*, vol. 16, no. 6, pp. 740–752, 2000.

M. Simoncelli, G. Zunino, and H.I. Christensen, “Autonomous pool cleaning: Self localization and autonomous navigation cleaning”, *Autonomous Robots*, vol. 9, no. 3, pp. 261–270, 2000.

A. Almansa and T. Lindeberg, “Fingerprint enhancement by shape adaptation of scale-space operators with automatic scale-selection”, *IEEE Transactions on Image Processing*, vol. 9, no. 12, pp. 2027–2042, 2000.

K. Wiltschi, A. Pinz, and T. Lindeberg, “An automatic assessment scheme for steel quality inspection”, *Machine Vision and Applications*, vol. 12, pp. 113–128, 2000.

I. Laptev, H. Mayer, T. Lindeberg, W. Eckstein, C. Steger, and A. Baumgartner, “Automatic extraction of roads from aerial images based on scale-space and snakes”, *Machine Vision and Applications*, vol. 12, no. 1, pp. 23–31, 2000.

A. Maki, P. Nordlund, and J.-O. Eklundh, “Attentional scene segmentation integrating depth and motion”, *Computer Vision and Image Understanding*, vol. 78, pp. 351–373, June 2000.

O. Wijk and H. I. Christensen, “Localization and navigation of a mobile robot using natural landmarks extracted from sonar data”, *Robotics and Autonomous Systems*, vol. 31, pp. 31–42, Apr. 2000.

F. Hoffmann, “Soft computing techniques for the design of mobile robot behaviours.”, *Journal of Information Sciences*, vol. 122, pp. 241–258, February 2000.

L. Bretzner and T. Lindeberg, “Qualitative multi-scale feature hierarchies for object tracking”, *Journal of Visual Communication and Image Representation*, vol. 11, pp. 115–129, 2000.

T. Lindeberg, P. Lidberg, and P. Roland, “Analysis of brain activation patterns using a 3-D scale-space primal sketch”, *Human Brain Mapping*, vol. 7, no. 3, pp. 166–194, 1999.

E. W. Large, H.I. Christensen, and R. Bajcsy, “Scaling the dynamics approach to path planning and control: Competition among behavioral constraints”, *International Journal of Robotics Research*, vol. 18, pp. 37–58, Jan. 1999.

P. Pirjanian, H. I. Christensen, and J. Faymann, “Application of voting to fusion of purposive modules: An experimental investigation”, *Robotics and Autonomous Systems*, vol. 23, pp. 253–266, July 1998.

H. I Christensen and J. L. Crowley, "Intelligent robotics systems", *Robotics and Autonomous Systems*, vol. 23, pp. 201–204, July 1998.

J.-O. Eklundh and S. Carlsson, "Appearance is more than shape, illumination, and pose' commentary to S. Edelman, 'Representation is representation of similarities", *Behavioural and Brain Sciences*, vol. 21, pp. 470–471, Aug. 1998.

S. Carlsson, "Geometric structure and view invariant recognition", *Philosophical Transactions of the Royal Society of London Series A*, vol. 356, no. 1740, pp. 1233–1250, 1998.

L. Bretzner and T. Lindeberg, "Feature tracking with automatic selection of spatial scales", *Computer Vision and Image Understanding*, vol. 71, pp. 385–392, Sept. 1998.

A. Francisco and F. Bergholm, "On the importance of being asymmetric in stereopsis - or why we should use skewed parallel cameras", *International Journal of Computer Vision*, vol. 29, no. 3, 1998.

T. Lindeberg, "Feature detection with automatic scale selection", *International Journal of Computer Vision*, vol. 30, no. 2, pp. 77–116, 1998.

T. Lindeberg, "Edge detection and ridge detection with automatic scale selection", *International Journal of Computer Vision*, vol. 30, no. 2, pp. 117–154, 1998.

T. Lindeberg, "A scale selection principle for estimating image deformations", *Image and Vision Computing*, vol. 16, no. 14, pp. 961–977, 1998.

S. Carlsson and D. Weinshall, "Dual computation of projective shape and camera positions from multiple images", *International Journal of Computer Vision*, vol. 27, pp. 227–243, 1998.

M. Li, "Kinematic calibration of an active head-eye system", *IEEE Transactions on Robotics and Automation*, vol. 14, pp. 153–157, Feb. 1998.

T. Lindeberg and J. Gårding, "Shape-adapted smoothing in estimation of 3-D depth cues from affine distortions of local 2-D structure", *Image and Vision Computing*, vol. 15, pp. 415–434, 1997.

S. J. Dickinson, H.I. Christensen, J.K. Tsotsos, and G. Olofsson, "Active object recognition integrating attention and view point control", *Computer Vision and Image Understanding*, vol. 67, no. 3, pp. 239–260, 1997.

S. J. Dickinson, R. Bergevin, I. Biederman, J.-O. Eklundh, R. Munck-Fairwood, A. K. Jain, and A. Pentland, "Panel report: the potential of geons for generic 3-D object recognition", *Image and Vision Computing*, vol. 15, pp. 277–292, 1997.

W. Zhang and F. Bergholm, "Multiscale blur estimation and edge type classification for scene analysis", *International Journal of Computer Vision*, vol. 24, pp. 187–218, 1998.

T. Lindeberg and M. Li, "Segmentation and classification of edges using minimum description length approximation and complementary junction cues", *Computer Vision and Image Understanding*, vol. 67, no. 1, pp. 88–98, 1997.

H. I. Christensen and W. Förstner, "Performance characteristics of vision algorithms", *Machine Vision and Applications*, vol. 9, no. 5/6, pp. 215–218, 1997. Special issue on: Performance Evaluation.

C. Fermüller and Y. Aloimonois, "On the geometry of visual correspondence", *International Journal of Computer Vision*, vol. 21, pp. 223–247, Feb. 1997.

M. Li and J.-M. Lavest, "Some aspects of zoom-lens camera calibration", *IEEE Trans. Pattern Analysis and Machine Intell.*, vol. 18, pp. 1105–1110, Nov. 1996.

S. Carlsson, R. Mohr, T. Moons, L. Morin, C. Rothwell, M. van Dienst, L. van Gool, F. Veillon, and A. Zisserman, "Semi-local projective invariants for the recognition of smooth plane curves", *International Journal of Computer Vision*, vol. 19, pp. 211–236, Aug. 1996.

P. Nordlund and T. Uhlin, "Closing the loop: Detection and pursuit of a moving object by a moving observer", *Image and Vision Computing*, vol. 14, pp. 265–275, May 1996.

J.-O. Eklundh, "Machine vision research at CVAP - an introduction", *International Journal of Computer Vision*, vol. 17, pp. 107–112, 1996.

K. Pahlavan, T. Uhlin, and J.-O. Eklundh, "Dynamic fixation and active perception", *International Journal of Computer Vision*, vol. 17, pp. 113–135, 1996.

K. Brunnström, J.-O. Eklundh, and T. Uhlin, "Active fixation for scene exploration", *International Journal of Computer Vision*, vol. 17, pp. 137–162, 1996.

J. Gårding and T. Lindeberg, "Direct computation of shape cues using scale-adapted spatial derivative operators", *International Journal of Computer Vision*, vol. 17, no. 2, pp. 163–191, 1996.

S. Carlsson, "Projectively invariant decomposition and recognition of planar shapes", *International Journal of Computer Vision*, vol. 17, pp. 193–209, 1996.

A. Maki and T. Uhlin, "Disparity selection in binocular pursuit", *IEICE, the Institute of Electronics Information and Communication Engineers Transactions on Information and Systems*, vol. E78-D, pp. 1591–1597, December 1995.

J. P. Frisby, D. Buckley, K. A. Wishart, J. Porrill, J. Gårding, and J. E. W. Mayhew, "Interaction of stereo and texture cues in the perception of three-dimensional steps", *Vision Research*, vol. 35, pp. 1463–1472, May 1995.

J. Gårding, J. Porrill, J. E. W. Mayhew, and J. P. Frisby, "Stereopsis, vertical disparity and relief transformations", *Vision Research*, vol. 35, pp. 703–722, Mar. 1995.

A. Francisco, "Continous principal distance change for binocular depth perception", *Image and Vision Computing*, vol. 13, pp. 101–109, Mar. 1995.

M. Andersson and Demetrios Betsis, "Point reconstruction from noisy images", *J. of Mathematical Imaging and Vision*, vol. 5, pp. 77–90, Jan. 1995.

S. Carlsson, "Relative positioning from model indexing", *Image and Vision Computing*, vol. 12, pp. 179–186, Apr. 1994.

K. Pahlavan and J.-O. Eklundh, "Mechatronics of active vision", *Mechatronics*, vol. 4, no. 2, pp. 113–123, 1994.

T. Lindeberg, "Scale-space theory: A basic tool for analysing structures at different scales", *Journal of Applied Statistics*, vol. 21, no. 2, pp. 225–270, 1994. Supplement *Advances in Applied Statistics: Statistics and Images: 2*.

T. Lindeberg, "Discrete derivative approximations with scale-space properties: A basis for low-level feature extraction", *J. of Mathematical Imaging and Vision*, vol. 3, pp. 349–376, Nov. 1993.

H. Winroth and M. Rendahl, "Exception handling in C", *C Users Journal*, vol. 11, pp. 33–46, Oct. 1993.

J. Gårding, "Shape from texture and contour by weak isotropy", *Artificial Intelligence*, vol. 64, pp. 243–297, Dec. 1993.

J. Gårding, "Direct estimation of shape from texture", *IEEE Trans. Pattern Analysis and Machine Intell.*, vol. 15, no. 11, pp. 1202–1208, 1993.

T. Lindeberg, "Effective scale: A natural unit for measuring scale-space lifetime", *IEEE Trans. Pattern Analysis and Machine Intell.*, vol. 15, pp. 1068–1074, Oct. 1993.

T. Lindeberg, "Detecting salient blob-like image structures and their scales with a scale-space primal sketch: A method for focus-of-attention", *International Journal of Computer Vision*, vol. 11, pp. 283–318, Dec. 1993.

K. Pahlavan and J.-O. Eklundh, "Head, eyes and head-eye systems", *Int J. of Pattern Recognition and Artificial Intelligence*, vol. 7, pp. 33–49, Feb. 1993.

K. Pahlavan, T. Uhlin, and J.-O. Eklundh, "Integrating primary ocular processes", *Image and Vision Computing*, vol. 10, pp. 654–662, Dec. 1992.

J. Gårding, "Shape from texture for smooth curved surfaces in perspective projection", *J. of Mathematical Imaging and Vision*, vol. 2, pp. 329–352, Dec. 1992.

J. Philip, "Motion parameters from right angles", *J. of Mathematical Imaging and Vision*, vol. 1, pp. 107–120, July 1992.

K. Pahlavan and J.-O. Eklundh, "A head-eye system — analysis and design", *Computer Vision, Graphics, and Image Processing:Image Understanding*, vol. 56, pp. 41–56, July 1992.

T. Lindeberg, "Scale-space behaviour of local extrema and blobs", *J. of Mathematical Imaging and Vision*, vol. 1, pp. 65–99, Mar. 1992.

T. Lindeberg and J.-O. Eklundh, "The scale-space primal sketch: Construction and experiments", *Image and Vision Computing*, vol. 10, pp. 3–18, Jan. 1992.

M. Li, "Hierarchical multipoint matching", *Photogrammetric Engineering and Remote Sensing*, vol. 57, pp. 1039–1047, Aug. 1991.

J. Porrill, J. Gårding, J.-O. Eklundh, J. P. Frisby, D. Buckley, S. Pollard, J. Mayhew, and E. Spivey, "Using shape-from-texture to calibrate stereo", *Perception*, vol. 20, no. 1, p. 90, 1991.

T. Lindeberg and J.-O. Eklundh, "Analysis of aerosol images using the scale-space primal sketch", *Machine Vision and Applications*, vol. 4, pp. 135–144, Aug. 1991.

F. Bergholm and S. Carlsson, "A "theory" of optical flow", *Computer Vision, Graphics, and Image Processing:Image Understanding*, vol. 53, pp. 171–188, Mar. 1991.

T. Lindeberg and J.-O. Eklundh, "On the computation of a scale-space primal sketch", *Journal of Visual Communication and Image Representation*, vol. 2, pp. 55–78, Mar. 1991.

J. Philip, "Estimation of three-dimensional motion of rigid objects from noisy observations", *IEEE Trans. Pattern Analysis and Machine Intell.*, vol. 13, pp. 61–66, Jan. 1991.

A. Bengtsson and J.-O. Eklundh, "Shape representation by multiscale contour approximation", *IEEE Trans. Pattern Analysis and Machine Intell.*, vol. 13, pp. 85–94, Jan. 1991.

N. Nordström, "Biased anisotropic diffusion: A unified regularization and diffusion approach to edge detection", *Image and Vision Computing*, vol. 8, pp. 318–327, Nov. 1990.

K. Brunnström, J.-O. Eklundh, and T. Lindeberg, "Scale and resolution in active analysis of local image structure", *Image and Vision Computing*, vol. 8, pp. 289–296, Nov. 1990.

T. Lindeberg, "Scale-space for discrete signals", *IEEE Trans. Pattern Analysis and Machine Intell.*, vol. 12, pp. 234–254, Mar. 1990.

J. Gårding, "Properties of fractal intensity surfaces", *Pattern Recognition Letters*, vol. 8, pp. 319–324, Dec. 1988.

F. Bergholm, "Motion from flow along contours – a note on robustness and ambiguous cases", *International Journal of Computer Vision*, vol. 2, no. 4, pp. 395–415, 1988.

F. Sjöberg and F. Bergholm, "Extraction of diffuse edges by edge focusing", *Pattern Recognition Letters*, vol. 7, pp. 181–190, Mar. 1988.

Ö. Ekeberg, "Robust dictionary lookup using associative networks", *International Journal of Man-Machine Studies*, vol. 28, pp. 29–43, 1988.

F. Bergholm, "Edge focusing", *IEEE Trans. Pattern Analysis and Machine Intell.*, vol. 9, pp. 726–741, Nov. 1987.

S. Chang, L. S. Davis, S. M. Dunn, A. Rosenfeld, and J.-O. Eklundh, "Texture discrimination by projective invariants", *Pattern Recognition Letters*, vol. 5, pp. 337–342, May 1987.

J.-O. Eklundh and L. Kjelldahl, "Computer graphics and computer vision – some unifying and discriminating features", *Computers and Graphics*, vol. 9, no. 4, pp. 339–349, 1985.

A. Lansner and Ö. Ekeberg, "Reliability and speed of recall in an associative network", *IEEE Trans. Pattern Analysis and Machine Intell.*, vol. 7, pp. 490–498, July 1985.

J. O. Eklundh, H. Yamamoto, and A. Rosenfeld, "A relaxation method for multispectral pixel classification", *IEEE Trans. Pattern Analysis and Machine Intell.*, vol. 2, pp. 72–75, Jan. 1980.

Books, book chapters and contributions to conference proceedings

E. A. Topp, H.Hüttenrauch, H.I.Christensen, , and K.Severinson Eklundh, "Bringing together human and robotic environment representations - a pilot study", in *Proceedings of the IEEE/RSJ Conference on Intelligent Robots and Systems*, (Beijing, China), pp. –, Oct. 2006.

E.A.Topp, , and H.I.Christensen, "Topological modelling for human augmented mapping", in *Proceedings of the IEEE/RSJ Conference on Intelligent Robots and Systems*, (Beijing, China), pp. –, Oct. 2006.

A. Tavakoli Targhi, E. Hayman, J.-O. Eklundh, and M. Shahshahani, "The eigen-transform and applications", in *Lecture Notes in Computer Science, ACCV 2006 Proceedings* (Heung-Yeung Shum P.J. Narayanan, Shree K. Nayar, ed.), pp. 70–79, Jan. 2006.

E.A. Topp, H. Hüttenrauch, H.I. Christensen, and K. Severinson Eklundh, "Acquiring a shared environment representation", in *Proceedings of the 1st ACM Conference on Human-Robot Interaction (HRI)*, (Salt Lake City, UT, USA), Mar. 2006.

S. Ekvall and D. Kragic, "Receptive field cooccurrence histograms for object detection", in *Proc. of the IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*, (Edmonton, AB, Canada), Aug 2005.

E.A. Topp and H.I. Christensen, "Tracking for following and passing persons", in *Proc. of the IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*, (Edmonton, AB, Canada), Aug 2005.

R. Johansson and R. Suzic, "Bridging the gap between information need and information acquisition", in *Proceedings of the 7th International Conference on Information Fusion*, pp. 1202–1209, July 2004.

O. Ramstrom and H. Christensen, "Object based visual attention: searching for object defined by size", in *WAPCV04*, pp. 9–16, 2004.

O. Ramstrom and H. Christensen, "Object detection using background context", in *Proc. ICPR04*, pp. 48–48, 2004.

R. Johansson and R. Suzic, "Bridging the gap between information need and information acquisition", in *Proceedings of the 7th International Conference on Information Fusion*, pp. 1202–1209, June 2004.

I. Laptev and T. Lindeberg, "Velocity adaptation of space-time interest points", in *Proc. ICPR'04*, (Cambridge, U.K.), Aug. 2004.

O. Linde and T. Lindeberg, "Object recognition using composed receptive field histograms of higher dimensionality", in *Proc. ICPR'04*, (Cambridge, U.K.), Aug. 2004. to appear.

H. Cornelius, R. Sara, D. Martinec, T. Pajdla, O. Chum, and J. Matas, "Towards complete free-form reconstruction of complex 3d scenes from an unordered set of uncalibrated images", in *Proc. ECCV Workshop Statistical Methods in Video Processing* (D. Comaniciu, R. Mester, and K. Kanatani, eds.), (Heidelberg, Germany), pp. 1–12, Springer-Verlag, May 2004.

I. Laptev and T. Lindeberg, "Local descriptors for spatio-temporal recognition", in *Proc. ECCV'04 Workshop on Spatial Coherence for Visual Motion Analysis*, (Prague, Czech Republic), May 2004. to appear.

P. Nillius and J.-O. Eklundh, "Classifying materials from their reflectance properties", in *Proc. 8th European Conference on Computer Vision, ECCV'04*, (Prague, Czech Republic), May 2004.

E. Hayman and J.-O. Eklundh, "Statistical background subtraction for a mobile observer", in *Proc. 9th International Conference on Computer Vision, ICCV03*, (Nice, France), pp. 67–74, Oct. 2003.

I. Laptev and T. Lindeberg, "Space-time interest points", in *Proc. 9th International Conference on Computer Vision, ICCV'03*, (Nice, France), pp. 432–439, Oct. 2003.

P. Nillius and J.-O. Eklundh, "Phenomenological eigenfunctions for image irradiance", in *Proc. 9th International Conference on Computer Vision, ICCV'03*, (Nice, France), pp. 568–575, Oct. 2003.

P. Althaus and H. I. Christensen, "Automatic map acquisition for navigation in domestic environments", in *Proceedings of the IEEE International Conference on Robotics and Automation*, pp. 1551–1556, 2003.

J. Thureson and S. Carlsson, "Finding object categories in cluttered images using minimal shape prototypes", in *Image Analysis, 13th Scandinavian Conference, SCIA 2003, Halmstad, Sweden, June/July, 2003, Proceedings* (J. Bigun and T. Gustavsson, eds.), (Berlin Heidelberg), pp. 1122–1129, Springer-Verlag, June 2003. Lecture Notes in Computer Science (LNCS), Volume 2749.

P. Nillius and J.-O. Eklundh, "Low dimensional representations of shaded surfaces under varying illumination", in *Proc. IEEE Computer Vision and Pattern Recognition*, (Madison, WI, USA), pp. II–185–192, 2003.

T. Lindeberg and L. Bretzner, "Real-time scale selection in hybrid multi-scale representations", in *Proc. Scale-Space'03* (L. Griffin, ed.), vol. 2695 of *Lecture Notes in Computer Science*, (Isle of Skye, Scotland), pp. 148–163, Springer-Verlag, June 2003.

I. Laptev and T. Lindeberg, "Interest point detection and scale selection in space-time", in *Proc. Scale-Space'03* (L. Griffin, ed.), vol. 2695 of *Lecture Notes in Computer Science*, (Isle of Skye, Scotland), pp. 372–387, Springer-Verlag, June 2003.

C. Undeman and T. Lindeberg, “Fully automatic segmentation of MRI brain images using probabilistic anisotropic diffusion and multi-scale watersheds”, in *Proc. Scale-Space’03* (L. Griffin, ed.), vol. 2695 of *Lecture Notes in Computer Science*, (Isle of Skye, Scotland), pp. 641–656, Springer-Verlag, June 2003.

S. Lenman, L. Bretzner, and B. Thuresson, “Using marking menus to develop command sets for computer vision based hand gesture interfaces”, in *Second Nordic Conference on Human-Computer Interaction, NordiCHI02*, (Aarhus, Denmark), pp. –, Oct. 2002. to appear.

O. Ramstrm and H. Christensen, “Visual attention using game theory”, in *Biologically Motivated Computer Vision* (Bulthoff, Lee, Poggio, and Wallraven, eds.), pp. 462–471, Springer, 2002.

C. Rother, S. Carlsson, and D. Tell, “Projective factorization of planes and cameras in multiple views”, in *International Conference on Pattern Recognition*, (Quebec, Canada), pp. 737–740, 2002.

M. Strandberg, “A fast grasp planner for a three-fingered hand based on 2D contours”, in *Proc. 33rd Int. Symposium on Robotics, ISR 2002*, (Stockholm, Sweden), october 2002.

P. Althaus and H. I. Christensen, “Behaviour coordination for navigation in office environments”, in *Proceedings of the IEEE/RSJ International Conference on Intelligent Robots and Systems*, pp. 2298–2304, 2002.

D. Kragic and H.I. Christensen, “Vision techniques for robotic manipulation and grasping”, in *Proc. 33rd International Symposium on Robotics , ISR 2002*, (Stockholm, Sweden), Oct. 2002.

D. Kragic and H.I. Christensen, “Model based techniques for robotic servoing and grasping”, in *Proc. IEEE/RSJ International Conference on Intelligent Robots and Systems, IROS’02*, (Lausanne, Switzerland), Oct. 2002.

M. Strandberg, “A fast grasp planner for a three-fingered hand based on 2D contours”, in *Proc. IEEE/RSJ International Conference on Intelligent Robots and Systems, IROS’02*, (Lausanne, Switzerland), Oct. 2002.

I. Laptev and T. Lindeberg, “Velocity-adapted spatio-temporal receptive fields for direct recognition of activities”, in *Proc. ECCV’02 Workshop on Statistical Methods in Video Processing*, (Copenhagen, Denmark), pp. 61–66, June 2002.

D. Tell and S. Carlsson, “Combining appearance and topology for wide baseline matching”, in *Proc. 7th European Conference on Computer Vision* (P. Johansen, ed.), vol. 2350 of *Lecture Notes in Computer Science*, (Copenhagen, Denmark), pp. 68–72, Springer Verlag, Berlin, May 2002.

J. Sullivan and S. Carlsson, “Recognizing and tracking human action”, in *Proc. 7th European Conference on Computer Vision* (P. Johansen, ed.), vol. 2350 of *Lecture Notes in Computer Science*, (Copenhagen, Denmark), pp. 629–644, Springer Verlag, Berlin, May 2002.

H. Sidenbladh, M. Black, and L. Sigal, “Implicit probabilistic models of human motion for synthesis and tracking”, in *Proc. 7th European Conference on Computer Vision* (P. Johansen, ed.), vol. 2350 of *Lecture Notes in Computer*

Science, (Copenhagen, Denmark), pp. 784–800, Springer Verlag, Berlin, May 2002.

C. Rother and S. Carlsson, "Linear multi view reconstruction with missing data", in *Proc. 7th European Conference on Computer Vision* (P. Johansen, ed.), vol. 2351 of *Lecture Notes in Computer Science*, (Copenhagen, Denmark), pp. 309–324, Springer Verlag, Berlin, May 2002.

E. Hayman and Eklundh J.-O, "Probabilistic and voting approaches to cue integration for figure-ground segmentation", in *Proc. 7th European Conference on Computer Vision* (P. Johansen, ed.), vol. 2352 of *Lecture Notes in Computer Science*, (Copenhagen, Denmark), pp. 469–486, Springer Verlag, Berlin, May 2002.

T. Lindeberg, "Time-recursive velocity-adapted spatio-temporal scale-space filters", in *Proc. 7th European Conference on Computer Vision* (P. Johansen, ed.), vol. 2350 of *Lecture Notes in Computer Science*, (Copenhagen, Denmark), pp. 52–67, Springer Verlag, Berlin, May 2002.

L. Bretzner, I. Laptev, and T. Lindeberg, "Hand-gesture recognition using multi-scale colour features, hierarchical features and particle filtering", in *Proc. Face and Gesture*, (Washington D.C., USA), pp. 63–74, May 2002.

A. Shokoufandeh, S. Dickinson, C. Jansson, L. Bretzner, and T. Lindeberg, "On the representation and matching of qualitative shape at multiple scales", in *Proc 7th European Conference on Computer Vision* (Heyden, Sparr, Nielsen, and Johansen, eds.), pp. 759–775, Springer, May 2002.

M. Bray, H. Sidenbladh, and J.O. Eklundh, "Recognition of gestures in the context of speech", in *International Conference on Pattern Recognition (ICPR02)*, (Quebéc City, Canada), 2002.

L. Petersson, P. Jensfelt, D. Tell, M. Strandberg, D. Kragic, and H.I. Christensen, "Systems integration for real-world manipulation tasks", in *Proc. IEEE International Conference on Robotics and Automation*, (Washington, USA), May 2002.

D. Kragic and H.I. Christensen, "Weak models and cue-integration for real-time tracking", in *Proc. IEEE International Conference on Robotics and Automation*, (Washington, USA), May 2002.

P. Althaus and H. I. Christensen, "Smooth task switching through behaviour competition", in *Proceedings of the 7th International Conference on Intelligent Autonomous Systems*, (Marina del Rey, CA), Mar. 2002.

P. Nillius and J.-O. Eklundh, "Automatic estimation of the projected light source direction", in *Proc. IEEE Computer Vision and Pattern Recognition, CVPR'01*, vol. 1, (Kauai, Hawaii), pp. 1076–1083, December 2001.

D. Roobaert, M. Zillich, and J.-O. Eklundh, "A pure learning approach to background-invariant object recognition using pedagocical support vector learning,", in *Proc. IEEE Computer Vision and Pattern Recognition, CVPR'01*, vol. 2, (Kauai, Hawaii), pp. 351–357, December 2001.

P. Althaus, H. I. Christensen, and F. Hoffmann, "Using the dynamical system approach to navigate in realistic real-world environments", in *Proc. IEEE International Conference on Intelligent Robots and Systems IROS'2001*, (Maui, Hawaii), pp. 1023–1029, Nov. 2001.

L. Petersson, D. Austin, and H.I Christensen, "DCA: A Distributed Control Architecture for Robotics", in *Proc. IEEE International Conference on Intelligent Robots and Systems IROS'2001*, vol. 4, (Maui, Hawaii), pp. 2361–2368, October 2001.

M. Lindstrm and J.-O. Eklundh, "Detecting and tracking moving objects from a mobile platform using a laser range scanner", in *Proc. IEEE International Conference on Intelligent Robots and Systems IROS'2001*, vol. 3, (Maui, Hawaii), pp. 1364–1369, October 2001.

F. Hoffmann and J. C. S. Zagal Montealegre, "Evolution of a tactile wall-following behavior in real time", in *Proc. 6th Online World Conference on Soft Computing in Industrial Applications (WSC6)*, September 2001.

M. Zucchelli and H. Christensen, "Recursive flow based structure from parallax with automatic rescaling", in *Proc. British Machine Vision Conference*, (Manchester, UK), pp. 183–192, September 2001.

M. Zucchelli and J. Kosecka, "Motion bias and structure distortion induced by calibration errors", in *Proc. British Machine Vision Conference*, (Manchester, UK), pp. 663–672, September 2001.

M. Zucchelli and G. Cervone, "An application of the learnable evolution model to the optimization of disparity maps", in *Proc. Artificial Intelligence and Applications*, (Marbella, Spain), pp. 403–408, September 2001.

G. Zunino and H.I. Christensen, "Simultaneous localization and mapping in domestic environments", in *Proc. IEEE Conference on Multisensor Fusion and Integration for Intelligent Systems, MFI'2001*, pp. 67–72, August 2001.

O. Cordon, F. Herrera, F. Hoffmann, and L. Magdalena, *Genetic Fuzzy Systems: Evolutionary Tuning and Learning of Fuzzy Knowledge Bases.* Advances in Fuzzy Systems, World Scientific, Singapore, July 2001.

F. Hoffmann, "Boosting a genetic fuzzy classifier", in *Proc. Joint 9th IFSA World Congress and 20th NAFIPS International Conference*, vol. 3, (Vancouver, Canada), pp. 1564–1569, July 2001.

L. Magdalena, O. Cordon, F. Gomide, F. Herrera, and F. Hoffmann, "Ten years of genetic fuzzy systems: Current framework and new trends", in *Proc. Joint 9th IFSA World Congress and 20th NAFIPS International Conference*, vol. 3, (Vancouver, Canada), pp. 1241–1246, July 2001.

G. Zunino and H.I. Christensen, "Navigation in realistic environments", in *Proc. International Symposium on Intelligent Robotics Systems, SIRS'2001*, pp. 405–413, July 2001.

C. Rother and S. Carlsson, "Linear multi view reconstruction and camera recovery", in *Proc. International Conference on Computer Vision*, (Vancouver, Canada), July 2001.

H. Sidenbladh and M. J. Black, "Learning the statistics of people in images and video", in *Proc. International Conference on Computer Vision*, vol. 2, (Vancouver, Canada), pp. 709–716, July 2001.

F. Hoffmann, "The role of fuzzy logic in evolutionary robotics", in *Fuzzy Logic Techniques for Autonomous Vehicle Navigation* (D. Driankov and A. Saffiotti, eds.), pp. 119–150, Springer-Verlag, 2001.

I. Laptev and T. Lindeberg, "Tracking of multi-state hand models using particle filtering and a hierarchy of multi-scale image features", in *Proc. Scale-Space'01* (M. Kerckhove, ed.), vol. 2106 of *Lecture Notes in Computer Science*, (Vancouver, Canada), pp. 63–74, Springer-Verlag, July 2001.

I. Laptev and T. Lindeberg, "A multi-scale feature likelihood map for direct evaluation of object hypotheses", in *Proc. Scale-Space'01* (M. Kerckhove, ed.), vol. 2106 of *Lecture Notes in Computer Science*, (Vancouver, Canada), pp. 98–110, Springer-Verlag, July 2001.

D. Ormoneit, H. Sidenbladh, M. J. Black, and T. Hastie, "Learning and tracking cyclic human motion", in *Advances in Neural Information Processing Systems, 13* (Todd K. Leen, Thomas G. Dietterich, and Volker Tresp, eds.), pp. 894–900, The MIT Press, 2001.

D. Kragic, A. Miller, and P. Allen, "Real time tracking meets on–line grasp planning", in *Proc. IEEE International Conference on Robotics and Automation*, vol. 3, (Seoul, Korea), pp. 2460–2466, may 2001.

J.-O. Eklundh and H.I. Christensen, "Computer Vision:Past and Future", in *Informatics: 10 Years Back, 10 Years Ahead* (R. Wilhelm, ed.), Lecture Notes in Computer Science, pp. 328–340, Springer-Verlag, 2001.

M. Björkman and J.-O. Eklundh, "Dynamic fixation in an active visual agent", in *Proc. Robot Vision 2001*, (Auckland, New Zealand), pp. 1–8, Feb. 2001.

D. Roobaert, "DirectSVM: a fast and simple support vector machine perceptron", in *Proc. IEEE International Workshop on Neural Networks for Signal Processing*, vol. 1, (Sidney, Australia), pp. 356–365, Dec. 2000.

L. Petersson, D. Austin, and D. Kragic, "High-level control of a mobile manipulator for door opening", in *Proc. IEEE/RSJ International Conference on Intelligent Robots and Systems*, vol. 3, (Takamatsu, Kagawa, Japan), pp. 2333–2338, Oct. 2000.

M. Seiz, P. Jensfelt, and H.I. Christensen, "Active exploration for feature based global localization", in *Proc. IEEE/RSJ International Conference on Intelligent Robots and Systems*, vol. 1, (Takamatsu, Kagawa, Japan), pp. 281–287, Oct. 2000.

C. Rother, "A new approach for vanishing point detection in architectural environments", in *11th British Machine Vision Conference 2000* (Majid Mirmehdi and Barry Thomas, eds.), pp. 382–391, BMVA, Sept. 2000.

F. Hoffmann and O. Nelles, "Structure identification of tsk-fuzzy models using genetic programming", in *Proc. Eighth International Conference on Informa-*

tion Processing and Management of Uncertainty in Knowledge-Based Systems (IPMU'00), vol. 1, (Madrid, Spain), pp. 438–445, July 2000.

P. Jensfelt, D. Austin, and H. I. Christensen, "Toward task oriented localization", in *Proc. Intelligent Autonomous Systems 6, IAS-6* (E. Pagello et al., ed.), (Venice, Italy), pp. 612–619, July 2000.

D. Kragic and H. I. Christensen, "A framework for visual servoing tasks", in *Proc. Intelligent Autonomous Systems 6, IAS-6* (E. Pagello et al., ed.), (Venice, Italy), pp. 835–842, July 2000.

L. Petersson, D. Austin, D. Kragic, and H. I. Christensen, "Towards an intelligent robot system", in *Proc. Intelligent Autonomous Systems 6, IAS-6* (E. Pagello et al., ed.), (Venice, Italy), pp. 704–709, July 2000.

M. Björkman and J.-O. Eklundh, "A real-time system for epipolar geometry and ego-motion estimation", in *Proc. IEEE Computer Vision and Pattern Recognition*, vol. 2, (Hilton Head, SC), pp. 506–513, June 2000.

H. Sidenbladh, M. J Black, and D. J. Fleet, "Stochastic tracking of 3d human figures using 2D image motion", in *European Conference on Computer Vision*, (Dublin, Ireland), pp. 702–718, Springer Verlag, June 2000.

D. Ormoneit, H. Sidenbladh, M. J. Black, and T. Hastie, "Learning and tracking cyclic human motion", in *EEE Workshop on Human Modeling, Analysis and Synthesis*, (Hilton Head SC USA), June 2000.

E. Björkman, J. C. Zagal, T. Lindeberg, and P. Roland, "Evaluation of design options for the scale-space primal sketch analysis of brain activation images", in *Neuroimage*, vol. 11, (San Antonio, Texas, USA), p. 656, Sixth Annual Meeting of the Organization For Human Brain Mapping, Academic Press, Inc., May 2000.

J. C. Zagal, E. Björkman, T. Lindeberg, and P. Roland, "Signficance determination for the scale-space primal sketch by comparison of statistics of scale-space blob volumes computed from pet signals vs. residual noise", in *Neuroimage*, vol. 11, (San Antonio, Texas, USA), p. 493, Sixth Annual Meeting of the Organization For Human Brain Mapping, Academic Press, Inc., May 2000.

D. Austin and P. Jensfelt, "Using multiple gaussian hypotheses to represent probability distributions for mobile robot localization", in *Proc. IEEE International Conference on Robotics and Automation*, vol. 2, (San Francisco, CA, USA), pp. 1036 –1041, May 2000.

P. Jensfelt, D. Austin, O. Wijk, and M. Andersson, "Feature based condensation for mobile robot localization", in *Proc. IEEE International Conference on Robotics and Automation*, vol. 2, (San Francisco, CA, USA), pp. 2531 –2537, May 2000.

P. Jensfelt, O. Wijk, and D. Austinand M. Andersson, "Experiments on augmenting condensation for mobile robot localization", in *Proc. IEEE International Conference on Robotics and Automation*, vol. 3, (San Francisco, CA, USA), pp. 2518 –2524, May 2000.

D. Kragic and H.I. Christensen, “Tracking techniques for visual servoing tasks”, in *Proc. IEEE International Conference on Robotics and Automation*, vol. 2, (San Francisco, CA, USA), pp. 1663 –1669, May 2000.

H. I. Christensen and J.-O. Eklundh, “Active vision from multiple cues”, in *Biologically Motivated Computer Vision* (S.-W. Lee, H. Bulthoff, and T. Poggio, eds.), (Seoul, Korea), pp. 209–216, Springer Verlag, May 2000. LNCS-1811.

H. Sidenbladh, F. De la Torre, and M. J Black, “A framework for modeling the appearance of 3D articulated figures”, in *Proc. IEEE International Conference on Automatic Face and Gesture Recognition*, (Grenoble, France), pp. 368–375, Mar. 2000.

D. Kragic and H. I Christensen, “Cue integration for manipulation”, in *Robust vision for vision-based control of motion* (M. Vincze and G.D. Hager, eds.), pp. 1–16, IEEE Press ISBN 0780353781, 2000.

D. Roobaert, P. Nillius, and J.-O. Eklundh, “Comparison of learning approaches to appearance-based 3d object recognition with and without cluttered background”, in *Proc. 4th Asian Conference on Computer Vision*, (Taipei, Taiwan), pp. 443–448, Jan. 2000.

H.I. Christensen, H. Bunke, and H. Noltemeier in *Sensor Based Intelligent Robots*, (Heidelberg), Springer Verlag, Dec. 1999. Lecture Notes in Artificial Intelligence Vol 1724.

H.I. Christensen, L. Peterssson, and M. Eriksson, “Mobile manipualation - getting a grip”, in *9th International Symposium on Robotics Research* (J. Hollerback and D. Kodichek, eds.), (New York NY), pp. 265–272, Springer Verlag, Dec. 1999.

D. Kragic and H. I Christensen, “Integration of visual cues for active tracking of an end-effector”, in *Proc. IEEE/RSJ International Conference on Intelligent Robots and Systems*, vol. 1, (Kyongju, Korea), pp. 362–368, Oct. 1999.

L. Petersson, M. Egerstedt, and H. I Christensen, “A hybrid control architecture for mobile manipulation”, in *Proc. IEEE/RSJ International Conference on Intelligent Robots and Systems*, vol. 3, (Kyongju, Korea), pp. 1285–1288, Oct. 1999.

T. Lindeberg, “Automatic scale selection as a pre-processing stage for interpreting the visual world”, in *Proc. Fundamental Structural Properties in Image and Pattern Analysis FSPIPA’99*, vol. 130 of *Schriftenreihen der sterreichischen Computer Gesellschaft*, (Budapest, Hungary), pp. 9–23, September 6-7 1999.

M. Björkman and J.-O. Eklundh, “Real-time epipolar geometry estimation and disparity”, in *Proc. International Conference on Computer Vision*, (Kerkyra, Greece), pp. 234–141, Sept. 1999.

M.J. Black, “Explaining optical flow events with parameterized spatio-temporal models”, in *Proc. IEEE Computer Vision and Pattern Recognition*, (Fort Collins, CO), pp. 326–332, 1999.

L. Bretzner and T. Lindeberg, "Qualitative multi-scale feature hierarchies for object tracking", in *Proc. 2nd International Conference on Scale-Space Theories in Computer Vision* (O. F. Olsen M. Nielsen, P. Johansen and J. Weickert, eds.), vol. 1682, (Corfu, Greece), pp. 117–128, Springer Verlag, Sept. 1999. Lecture Notes in Computer Science, (Extended version available as Tech. Rep. ISRN KTH/NA/P–99/09–SE).

D. Roobaert and M.M. Van Hulle, "View-based 3D object recognition with support vector machines", in *Proc. IEEE International Workshop on Neural Networks for Signal Processing,*, (Wisconsin, USA), pp. 77–84, Aug. 1999.

D. Roobaert, "Improving the generalisation of linear support vector machines: an application to 3D object recognition with cluttered background", in *Proceedings of the Workshop on Support Vector Machines at the 16th International Joint Conference on Artificial Intelligence*, (Stockholm, Sweden), pp. 29–33, July 1999.

D. Tell and S. Carlsson, "View based visual servoing using epipolar geometry", in *Proceedings of The 11th Scandinavian Conference on Image Analysis*, (Kangerlussuaq, Greenland), pp. 63–70, June 1999.

D. Svedberg and S. Carlsson, "Calibration, pose and novel views from singe images of constrained scenes", in *Proceedings of The 11th Scandinavian Conference on Image Analysis*, (Kangerlussuaq, Greenland), pp. 111–115, June 1999.

M. Andersson, A. Orebäck, M. Lindström, and H. I. Christensen, "ISR: An intelligent service robot", in *Sensor Based Intelligent Robots*, vol. 1724 of *Lecture Notes in Artificial Intelligence*, pp. 287–310, Springer Verlag, 1999.

P. Jensfelt and H.I. Christensen, "Laser based pose tracking", in *Proc. IEEE International Conference on Robotics and Automation*, vol. 4, (Detroit, MI), pp. 2994–3000, May 1999.

H. Sidenbladh, D. Kragic, and H. I Christensen, "A person following behaviour for a mobile robot", in *Proc. IEEE International Conference on Robotics and Automation*, vol. 1, (Detroit, MI), pp. 670–675, May 1999.

D. Kragic and H. I Christensen, "Using a coarsely calibrated vision system for 3d grasping", in *Proc. Computational Intelligence for Modelling, Control and Automation* (M. Mohammadian, ed.), (Vienna, Austria), pp. 91–103, IOS Press, Feb. 1999.

H. I. Christensen (Ed.) in *Computer Vision Systems*, (Las Palmas, ES), Springer Verlag, Jan. 1999. Lecture Notes in Computer Science Vol 1542.

T. Lindeberg, "Principles for automatic scale selection", in *Handbook on Computer Vision and Applications* (B. Jhne (et al.), ed.), pp. 239–274, Boston, USA: Academic Press, 1999.

P. Nordlund and J.-O. Eklundh, "Real-time maintenance of figure-ground segmentaion", in *Proc. 1st Int. Conference on Computer Vision Systems* (H. I. Christensen, ed.), vol. 1542 of *Lecture Notes in Computer Science*, (Las Palmas, Gran Canaria), pp. 115–134, Springer Verlag, Berlin, Jan. 1999.

H.I. Christensen and J.-O. Eklundh, “Visual navigation – a survey”, in *CESA-98*, (Tunisia), IEEE Computer Society Press, Apr. 1998.

L. Bretzner and T. Lindeberg, “Use your hand as a 3-D mouse or relative orientation from extended sequences of sparse point and line correspondances using the affine trifocal tensor”, in *Proc. 5th European Conference on Computer Vision* (H. Burkhardt and B. Neumann, eds.), vol. 1406 of *Lecture Notes in Computer Science*, (Freiburg, Germany), pp. 141–157, Springer Verlag, Berlin, June 1998.

C. G. Bräutigam, J.-O. Eklundh, and H. I. Christensen, “A model-free voting approach for integrating multiple cues”, in *Proc. 5th European Conference on Computer Vision* (H. Burkhardt and B. Neumann, eds.), vol. 1406 of *Lecture Notes in Computer Science*, (Freiburg, Germany), pp. 734–750, Springer Verlag, Berlin, June 1998.

S. Carlsson, “Symmetry in perspective”, in *Proc. 5th European Conference on Computer Vision*, (Freiburg, Germany), Springer Verlag, Berlin, June 1998.

P. Fornland, “Dominant plane detection for uncalibrated binocular vision”, in *Proc. International Symposium on Intelligent Robotic Systems* (Nadayagar, ed.), (Bangalore, India), Jan. 1998.

P. Nordlund and J.-O. Eklundh, “Towards a seeing agent”, in *First Int. Workshop on Cooperative Distributed Vision*, (Kyoto, Japan), pp. 93–123, Nov. 1997.

P. Pirjanian and H. I. Christensen, “Behaviour coordination using multiple objective decision making”, in *Proc. Conf. on Intelligent Systems and Advanced Manufacturing*, (Pittsburgh, PA, USA), SPIE, Oct. 1997.

K. Wiltschi, A. Pinz, and T. Lindeberg, “Classification of carbide distributions using scale selection and directional distributions”, in *Proc. 4th International Conference on Image Processing*, vol. II, (Santa Barbara, California), pp. 122–125, IEEE, Oct. 1997.

T. Lindeberg, “On automatic selection of temporal scales in time-casual scale-space”, in *Proc. AFPAC'97: Algebraic Frames for the Perception-Action Cycle* (G. Sommer and J. J. Koenderink, eds.), vol. 1315 of *Lecture Notes in Computer Science*, (Kiel, Germany), pp. 94–113, Springer Verlag, Berlin, Sept. 1997.

A. Naeve, “Structure from translational observer motion”, in *Proc. AFPAC'97: Algebraic Frames for the Perception-Action Cycle* (G. Sommer and J. J. Koenderink, eds.), vol. 1315 of *Lecture Notes in Computer Science*, (Kiel, Germany), Springer Verlag, Berlin, Sept. 1997.

P. Pirjanian, H. I. Christensen, and J. Fayman, “Experimental evaluation of voting schemes for fusion of redundant purposive modules”, in *Proc. of the 5th International Symposium on Intelligent Robotic Systems 1997* (H. I. Christensen, C. Bräutigam, and C. Ridderström, eds.), (Stockholm, Sweden), pp. 131–140, KTH, July 1997.

K. T. Simsarian, “A system for robotic telepresence employing vr as the communication medium: Interface metaphors”, in *Proc. of the 5th International Symposium on Intelligent Robotic Systems 1997* (H. I. Christensen, C. Bräutigam, and C. Ridderström, eds.), (Stockholm, Sweden), pp. 5–11, KTH, July 1997.

H. Winroth, "A scripting language interface to C++ libraries", in *Proc. of TOOLS USA*, July 1997.

L. Bretzner and T. Lindeberg, "On the handling of spatial and temporal scales in feature tracking", in *Scale-Space Theory in Computer Vision: Proc. First Int. Conf. Scale-Space'97* (B. M. ter Haar Romeny, L. M. J. Florack, J. J. Koenderink, and M. A. Viergever, eds.), vol. 1252 of *Lecture Notes in Computer Science*, (Utrecht, The Netherlands), pp. 128–139, Springer Verlag, Berlin, July 1997.

T. Lindeberg, "Linear spatio-temporal scale-space", in *Scale-Space Theory in Computer Vision: Proc. First Int. Conf. Scale-Space'97* (B. M. ter Haar Romeny, L. M. J. Florack, J. J. Koenderink, and M. A. Viergever, eds.), vol. 1252 of *Lecture Notes in Computer Science*, (Utrecht, The Netherlands), pp. 113–127, Springer Verlag, Berlin, July 1997. Extended version available as technical report ISRN KTH NA/P–01/22–SE from KTH.

A. Argyros and S. Orphanoudakis, "Independent 3d motion detection based on depth elimination in normal flow fields", in *Proc. IEEE Comp. Soc. Conf. on Computer Vision and Pattern Recognition, 1997*, (San Juan, Puerto Rico), IEEE Computer Society Press, June 1997.

P. Fornland and C. Schnörr, "A robust and convergent iterative approach for determining the dominant plane from two views without correspondence and calibration", in *Proc. IEEE Comp. Soc. Conf. on Computer Vision and Pattern Recognition, 1997*, (San Juan, Puerto Rico), pp. 508–513, IEEE Computer Society Press, June 1997.

K. T. Simsarian and K.-P. Åkesson, "Windows on the world: An example of augmented virtuality", in *Interface 1997, Sixth International Conference Montpellier 1997: Man-machine interaction*, pp. 68–71, May 1997.

J. Fayman, P. Pirjanian, and H. I. Christensen, "Fusion of redundant visual behaviours", in *Proc. IEEE International Conference on Robotics and Automation 1997*, vol. 1, pp. 425–430, IEEE Computer Society Press, May 1997.

E. Large, H. I. Christensen, and R. Bajcsy, "Dynamic robot planning: Cooperation through competition", in *Proc. IEEE International Conference on Robotics and Automation 1997*, vol. 3, pp. 2306–2312, IEEE Computer Society Press, May 1997.

P. Nordlund and J.-O. Eklundh, "Figure-ground segmentation as a step towards deriving object properties", in *Proc. 3rd Int. Workshop on Visual Form*, (Capri, Italy), May 1997.

P. Lidberg, T. Lindeberg, and P. Roland, "Analysis of brain activation patterns using a 3-D scale-space primal sketch", in *Proc. 3rd International Conference on Functional Mapping of the Human Brain*, (Copenhagen, Denmark), p. 393, May 1996. Neuroimage vol. 5 no. 4 p 393, 1997.

J.-O. Eklundh, T. Uhlin, P. Nordlund, and A. Maki, "Active vision and seeing robots", in *The Seventh International Symposium on Robotics Research* (G. Giralt and G. Hirzinger, eds.), pp. 416–427, Springer-Verlag, 1996.

B. Eriksson, F. Johansson, T. Lindeberg, and P. Roland, "Automatic matching of brain images and brain atlases using multi-scale fusion algorithms", in *Proc 3rd International Conference on Functional Mapping of the Human Brain* (L. Friberg, A. Gjedde, S. Holm, N.A. Lassen, and M. Novak, eds.), (Copenhagen, Denmark), p. 419, Academic Press, May 1997. Neuroimage vol. 5 no 4. p 419, 1997.

H. I. Christensen and P. Pirjanian, "Theoretical methods for planning and control in mobile robotics", in *Proc. 1st International Conference on Conventional and Knowledge Based Intelligent Electronic Systems (KES-97)*, pp. 32–38, IEEE Computer Society Press, Apr. 1997.

W. X. Wang, F. Bergholm, and O. Stephansson, "Image analysis of fragment size and shape", in *Proc. 5th Int. Symposium on Rock Fragmentation by Blasting*, (Montreal , Canada), Aug. 1996.

T. Lindeberg, "On the axiomatic foundations of linear scale-space", in *Gaussian Scale-Space Theory: Proc. PhD School on Scale-Space Theory* (J. Sporring, M. Nielsen, L. Florack, and P. Johansen, eds.), (Copenhagen, Denmark), Kluwer Academic Publishers, May 1996.

A. Almansa and T. Lindeberg, "Enhancement of fingerprint images by shape-adapted scale-space operators", in *Gaussian Scale-Space Theory: Proc. PhD School on Scale-Space Theory* (J. Sporring, M. Nielsen, L. Florack, and P. Johansen, eds.), (Copenhagen, Denmark), Kluwer Academic Publishers, May 1996.

S. Carlsson, "Combinatorial geometry for shape representation and indexing", in *Object Representation in Computer Vision II* (Ponce, Zisserman, and Hebert, eds.), vol. 1144 of *Lecture Notes in Computer Science*, pp. 53–78, Springer Verlag, Berlin, 1996.

T. Lindeberg, "Automatic scale selection as a pre-processing stage to interpreting real-world data", in *Proc. 8th International Conference on Tools with Artificial Intelligence*, (Toulouse, France), p. 490, IEEE Computer Society Press, Nov. 1996.

A. Maki, T. Uhlin, and J.-O. Eklundh, "A direct disparity estimation technique for depth segmentation", in *Proc. 5th IAPR Workshop on Machine Vision Applications*, pp. 530–533, Nov. 1996.

T. Lindeberg, "Scale-space theory: A framework for handling image structures at multiple scales", in *Proc. CERN School of Computing*, (Egmond aan Zee, The Netherlands), pp. 27–38, Sept. 1996. Tech. Rep. CERN 96-08.

J. C. Clarke, S. Carlsson, and A. Zisserman, "Detecting and tracking linear features efficiently", in *Proc. British Machine Vision Conference 1996*, pp. 415–424, Sept. 1996.

J.-O. Eklundh, P. Nordlund, and T. Uhlin, "Issues in active vision: attention and cue integration/selection", in *Proc. British Machine Vision Conference 1996*, pp. 1–12, Sept. 1996.

K. Pahlavan, “Designing an anthropomorphic head-eye system”, in *Visual Attention and Cognition* (W. H. Zangemeister, H. S. Stiehl, and C. Freksa, eds.), ch. 4, pp. 269–292, Elsevier, 1996.

K. Brunnström and A. J. Stoddart, “Genetic algorithms for free-form surface matching”, in *Proc. 13th International Conference on Pattern Recognition*, vol. IV, (Vienna, Austria), pp. 689–693, IEEE Computer Society Press, Aug. 1996.

C. Bräutigam, J. Gårding, and J.-O. Eklundh, “Seeing the obvious”, in *Proc. 13th International Conference on Pattern Recognition*, vol. I, (Vienna, Austria), pp. 67–72, IEEE Computer Society Press, Aug. 1996.

A. Maki, P. Nordlund, and J.-O. Eklundh, “A computational model of depth-based attention”, in *Proc. 13th International Conference on Pattern Recognition*, vol. IV, (Vienna, Austria), pp. 734–739, IEEE Computer Society Press, Aug. 1996.

S. Åkerman, T. Lindeberg, and P. Roland, “Surface model generation and segmentation of the human celebral cortex for the construction of unfolded cortical maps”, in *2nd International Conference on Functional Mapping of the Human Brain*, (Boston, Massachussetts), p. 126, June 1996. In: *NeuroImage*, vol. 3, no. 3.

T. Lindeberg, “Edge detection and ridge detection with automatic scale selection”, in *Proc. IEEE Comp. Soc. Conf. on Computer Vision and Pattern Recognition, 1996*, (San Francisco, California), pp. 465–470, IEEE Computer Society Press, June 1996.

J.-O. Eklundh, T. Uhlin, P. Nordlund, and A. Maki, “Active vision and seeing robots”, in *The 7th Symposium on Robotics Research* (G. Giralt and G. Hirzinger, eds.), Lecture Notes in Computer Science, pp. 416–427, Springer Verlag, Berlin, May 1996.

J.-O. Eklundh, T. Uhlin, P. Nordlund, and A. Maki, “Developing an active observer”, in *Invited papers from the 2nd Asian Conference on Computer Vision* (S. Li, ed.), Lecture Notes in Computer Science, Springer Verlag, Berlin, 1996.

J. Gårding, J. Porrill, J.P. Frisby, and J.E.W. Mayhew, “Uncalibrated relief reconstruction and model alignment from binocular disparities”, in *Proc. 4th European Conference on Computer Vision*, vol. 1064 of *Lecture Notes in Computer Science*, (Cambridge, UK), pp. 427–438, Springer Verlag, Berlin, Apr. 1996.

T. Lindeberg and D. Fagerström, “Scale-space with causal time direction”, in *Proc. 4th European Conference on Computer Vision*, vol. 1064, (Cambridge, UK), pp. 229–240, Springer Verlag, Berlin, Apr. 1996.

J.-O. Eklundh, T. Uhlin, P. Nordlund, and A. Maki, “Developing an active observer”, in *Proc. 2nd Asian Conference on Computer Vision* (Eam Khwang Teo, ed.), vol. 2, (Singapore), pp. 783–787, Dec. 1995.

J.-O. Eklundh, “Trends in active vision”, in *Computer Science Today* (J. van Leuween, ed.), vol. 1000 of *Lecture Notes in Computer Science*, pp. 515–517, Springer Verlag, Berlin, 1995.

P. Fornland, "Direct obstacle detection and motion from spatio-temporal derivatives", in *Proc. 6th International Conf. on Computer Analysis of Images and Patterns* (Václav Klaváč and Radim Šára, eds.), (Prague, Czech Republic), pp. 874–879, Sept. 1995.

A. Maki, L. Bretzner, and J.-O. Eklundh, "Local Fourier phase and disparity estimates: An analytical study", in *Proc. 6th International Conf. on Computer Analysis of Images and Patterns* (Václav Klaváč and Radim Šára, eds.), (Prague, Czech Republic), pp. 868–873, Sept. 1995.

P. Nordlund and T. Uhlin, "Closing the loop: Pursuing a moving object by a moving observer", in *Proc. 6th International Conf. on Computer Analysis of Images and Patterns* (Václav Klaváč and Radim Šára, eds.), (Prague, Czech Republic), pp. 400–407, Sept. 1995.

T. Uhlin and J.-O. Eklundh, "Animate vision in a rich environment", in *Proc. 14th Int. Joint Conf. Artificial Intelligence*, (Montreal, Canada), pp. 27–33, Aug. 1995.

T. Lindeberg and M. Li, "Segmentation and classification of edges using minimum description length approximation and complementary junction cues", in *Theory and Applications of Image Analysis II: Selected Papers from the 9th Scandinavian Conference on Image Analysis Uppsala, Sweden* (G. Borgefors, ed.), (Singapore), World Scientific Publishing, 1995.

W. Wang and F. Bergholm, "On edge density for automatic size inspection", in *Theory and Applications of Image Analysis II: Selected Papers from the 9th Scandinavian Conference on Image Analysis Uppsala, Sweden* (G. Borgefors, ed.), (Singapore), World Scientific Publishing, 1995.

S. Carlsson, "Duality of reconstruction and positioning from projective views", in *Proc. IEEE Workshop on Representations of Visual Scenes*, (Cambridge, MA), pp. 85–92, June 1995.

J. Gårding, "Surface orientation and curvature from differential texture distortion", in *Proc. 5th International Conference on Computer Vision*, (Cambridge, MA), pp. 733–739, June 1995.

M. Li and D. Betsis, "Head-eye calibration", in *Proc. 5th International Conference on Computer Vision*, (Cambridge, MA), pp. 40–45, June 1995.

T. Lindeberg, "Direct estimation of affine deformations of brightness patterns using visual front-end operators with automatic scale selection", in *Proc. 5th International Conference on Computer Vision*, (Cambridge, MA), pp. 134–141, June 1995.

T. Uhlin, P. Nordlund, A. Maki, and J.-O. Eklundh, "Towards an active visual observer", in *Proc. 5th International Conference on Computer Vision*, (Cambridge, MA), pp. 679–686, June 1995.

Antonio Francisco and Fredrik Bergholm, "On the importance of being asymmetric in stereopsis- or the use of skewed parallel cameras", in *Proc. 9th Scandinavian Conference on Image Analysis* (G. Borgefors, ed.), (Uppsala, Sweden), pp. 77–86, Swedish Society for Automated Image Processing, June 1995.

T. Lindeberg and M. Li, "Segmentation and classification of edges using minimum description length approximation and complementary junction cues", in *Proc. 9th Scandinavian Conference on Image Analysis* (G. Borgefors, ed.), (Uppsala, Sweden), pp. 767–776, Swedish Society for Automated Image Processing, June 1995.

Weixing Wang and Fredrik Bergholm, "Moment-based edge density for automatic size inspection", in *Proc. 9th Scandinavian Conference on Image Analysis* (G. Borgefors, ed.), (Uppsala, Sweden), pp. 895–904, Swedish Society for Automated Image Processing, June 1995.

A. Naeve and J.-O. Eklundh, "Representing generalized cylinders", in *Proceedings of Europe-China Workshop on Geometrical Modeling & Invariants For Computer Vision* (R. Mohr and W. Chenke, eds.), (China), pp. 63–70, Xidian University Press, Apr. 1995.

J.-O. Eklundh, G. Olofsson, and M. Li, "Geometric description and maintenance of 3-D objects in an active vision system", in *Vision as Process* (J. L. Crowley and H. I. Christensen, eds.), Basic Research Series, pp. 301–318, Springer Verlag, Berlin, 1995.

J.-O. Eklundh, K. Pahlavan, and T. Uhlin, "The KTH-head-eye-system", in *Vision as Process* (J. L. Crowley and H. I. Christensen, eds.), Basic Research Series, pp. 237–259, Springer Verlag, Berlin, 1995.

L. Olsson and H. Winroth, "KTH software integration in the VAP project", in *Vision as Process* (J. L. Crowley and H. I. Christensen, eds.), Basic Research Series, pp. 47–55, Springer Verlag, Berlin, 1995.

A. Maki, T. Uhlin, and J.-O. Eklundh, "Disparity selection in binocular pursuit", in *Proc. 4th IAPR (International Association for Pattern Recognition) Workshop on Machine Vision Applications*, pp. 182–185, Dec. 1994.

A. Naeve and J.-O. Eklundh, "Generalized cylinders - what are they?", in *Aspects of Visual Form Processing* (C. Arcelli, L.P. Cordella, and G. Sanniti di Baja, eds.), pp. 384–409, World Scientific Press, Singapore, 1994.

H. Winroth, "Object-oriented communication in image processing systems", in *Experimental Environments for Computer Vision and Image Processing* (H. I. Christensen and J. L. Crowley, eds.), vol. 11 of *Machine Perception Artificial Intelligence*, pp. 253–280, World Scientific, 1994.

L. Olsson, "Module network tool", in *Experimental Environments for Computer Vision and Image Processing* (H. I. Christensen and J. L. Crowley, eds.), vol. 11 of *Machine Perception Artificial Intelligence*, pp. 225–252, World Scientific, 1994.

T. Lindeberg and B. ter Haar Romeny, "Linear scale-space I: Basic theory", in *Geometry-Driven Diffusion in Computer Vision* (B. ter Haar Romeny, ed.), Series in Mathematical Imaging and Vision, pp. 1–41, Dordrecht, Netherlands: Kluwer Academic Publishers, 1994.

T. Lindeberg and B. ter Haar Romeny, "Linear scale-space II: Early visual operations", in *Geometry-Driven Diffusion in Computer Vision* (B. ter

Haar Romeny, ed.), Series in Mathematical Imaging and Vision, pp. 43–77, Dordrecht, Netherlands: Kluwer Academic Publishers, 1994.

T. Lindeberg, "Junction detection with automatic selection of detection scales and localization scales", in *Proc. 1st International Conference on Image Processing*, vol. I, (Austin, Texas), pp. 924–928, IEEE Computer Society Press, Nov. 1994.

A. Maki, J. Gårding, and J.-O. Eklundh, "2-d phase-based ground plane obstacle detection", in *Proc. The 33rd SICE (Society of Instrument and Control Engineers) Annual Conference: SICE*, (Tokyo, Japan), pp. 725–728, July 1994.

S. J. Dickinson, P. Jasiobedzki, G. Olofsson, and H. I. Christensen, "Qualitative tracking of 3-d objects using active contour networks", in *Proc. IEEE Comp. Soc. Conf. on Computer Vision and Pattern Recognition*, (Seattle, Washington), pp. 812–817, June 1994.

S. Carlsson, "Sufficient image structure for 3-D motion and shape estimation", in *Proc. 3rd European Conference on Computer Vision* (J.-O. Eklundh, ed.), vol. 800 of *Lecture Notes in Computer Science*, (Stockholm, Sweden), pp. 83–91, Springer Verlag, Berlin, May 1994.

S. J. Dickinson, H. I. Christensen, J. Tsotsos, and G. Olofsson, "Active object recognition integrating attention and viewpoint control", in *Proc. 3rd European Conference on Computer Vision* (J.-O. Eklundh, ed.), vol. 801 of *Lecture Notes in Computer Science*, (Stockholm, Sweden), pp. 3–14, Springer Verlag, Berlin, May 1994.

J. Gårding and T. Lindeberg, "Direct estimation of local surface shape in a fixating binocular vision system", in *Proc. 3rd European Conference on Computer Vision* (J.-O. Eklundh, ed.), vol. 800 of *Lecture Notes in Computer Science*, (Stockholm, Sweden), pp. 365–376, Springer Verlag, Berlin, May 1994.

M. Li, "Camera calibration of a head-eye system for active vision", in *Proc. 3rd European Conference on Computer Vision* (J.-O. Eklundh, ed.), vol. 800 of *Lecture Notes in Computer Science*, (Stockholm, Sweden), pp. 543–554, Springer Verlag, Berlin, May 1994.

T. Lindeberg and J. Gårding, "Shape-adapted smoothing in estimation of 3-D depth cues from affine distortions of local 2-D structure", in *Proc. 3rd European Conference on Computer Vision* (J.-O. Eklundh, ed.), vol. 800 of *Lecture Notes in Computer Science*, (Stockholm, Sweden), pp. 389–400, Springer Verlag, Berlin, May 1994.

T. Lindeberg, *Scale-Space Theory in Computer Vision*. The Kluwer International Series in Engineering and Computer Science, Dordrecht, Netherlands: Kluwer Academic Publishers, 1994.

S. Carlsson, "The double algebra: An effective tool for computing invariants in computer vision", in *Applications of Invariance in Computer Vision: Proc. 2nd Joint European–US Workshop, Azores, Portugal, Oct. 1993* (J.L. Mundy, A. Zisserman, and D. Forsyth, eds.), vol. 825 of *Lecture Notes in Computer Science*, pp. 145–164, Springer Verlag, Berlin, 1994.

M. Andersson and P. Nordlund, "A model-based system for localization and tracking", in *Proc. Workshop on Computer Vision for Space Applications*, (Antibes, France), Sept. 1993.

K. Brunnström, J.-O. Eklundh, and T. Uhlin, "Active fixation for scene exploration", in *Proc. British Machine Vision Conference*, (Guildford, UK), pp. 55–64, Springer Verlag, Berlin, Sept. 1993.

S. Carlsson, "Relative positioning from model indexing", in *Proc. British Machine Vision Conference*, (Guildford, UK), pp. 335–350, Springer Verlag, Berlin, Sept. 1993.

K. Brunnström and J.-O. Eklundh, "Active fixation for junction classification", in *Proceedings 5th Inter. Conf. on Computer Analysis of Images and Patterns*, (Budapest, Hungary), pp. 452–459, Sept. 1993.

J.-O. Eklundh, K. Pahlavan, and T. Uhlin, "Dynamic fixation", in *Proc. II Conf. on Computer Applications to Engineering Systems*, (Nicosia, Cyprus), pp. 462–467, July 1993.

T. Uhlin, K. Pahlavan, and J.-O. Eklundh, "The KTH head-eye system, design and control", in *Proc. Robotikdagar, Automatiserad Tillverkning - från Högteknologi till Tillämpning*, (Linköping, Sweden), June 1993.

J.-O. Eklundh, K. Pahlavan, and T. Uhlin, "Computer vision and seeing systems", in *Proc. Mechantronical Computer Systems for Perception and Action*, (Halmstad, Sweden), pp. 241–267, June 1993.

T. Lindeberg, "Scale-space theory and computation of shape cues by retinotopic processes", in *International Conference on Volume Image Processing*, (Utrecht, Netherlands), pp. 17–20, June 1993.

F. Bergholm, "On velocity estimation and mean square error", in *Proc. 8th Scandinavian Conference on Image Analysis* (K. A. Høgdra, B. Braathen, and K. Heia, eds.), (Tromsø, Norway), pp. 1093–1100, Norwegian Society for Image Processing and Pattern Recognition, May 1993.

F. Bergholm and W. Zhang, "On the usage of signatures and recent developments of edge focusing", in *Proc. 8th Scandinavian Conference on Image Analysis* (K. A. Høgdra, B. Braathen, and K. Heia, eds.), (Tromsø, Norway), pp. 1061–1069, Norwegian Society for Image Processing and Pattern Recognition, May 1993.

S.J. Dickinson, G. Olofsson, and H.I. Christensen, "Qualitative prediction in active recognition", in *Proc. 8th Scandinavian Conference on Image Analysis* (K. A. Høgdra, B. Braathen, and K. Heia, eds.), (Tromsø, Norway), pp. 337–344, Norwegian Society for Image Processing and Pattern Recognition, May 1993.

A. Francisco, T. Uhlin, and J.-O. Eklundh, "Continuous vergence movements for relative depth acquisition", in *Proc. 8th Scandinavian Conference on Image Analysis* (K. A. Høgdra, B. Braathen, and K. Heia, eds.), (Tromsø, Norway), pp. 97–104, Norwegian Society for Image Processing and Pattern Recognition, May 1993.

T. Lindeberg, "On scale selection for differential operators", in *Proc. 8th Scandinavian Conference on Image Analysis* (K. A. Høgdra, B. Braathen, and K. Heia, eds.), (Tromsø, Norway), pp. 857–866, Norwegian Society for Image Processing and Pattern Recognition, May 1993.

A. Maki, T. Uhlin, and J.-O. Eklundh, "Phase-based disparity estimation in binocular tracking", in *Proc. 8th Scandinavian Conference on Image Analysis* (K. A. Høgdra, B. Braathen, and K. Heia, eds.), (Tromsø, Norway), pp. 1145–1152, Norwegian Society for Image Processing and Pattern Recognition, May 1993.

S. Carlsson, "Projectively invariant decomposition and recognition of planar shapes", in *Proc. 4th International Conference on Computer Vision* (H-H. Nagel, ed.), (Berlin, Germany), pp. 471–475, IEEE Computer Society Press, May 1993.

A. Francisco, "Relative depth from vergence micromovements", in *Proc. 4th International Conference on Computer Vision* (H-H. Nagel, ed.), (Berlin, Germany), pp. 481–486, IEEE Computer Society Press, May 1993.

M. Li, "Minimum description length based 2-D shape description", in *Proc. 4th International Conference on Computer Vision* (H-H. Nagel, ed.), (Berlin, Germany), pp. 512–517, IEEE Computer Society Press, May 1993.

T. Lindeberg and J. Gårding, "Shape from texture from a multi-scale perspective", in *Proc. 4th International Conference on Computer Vision* (H-H. Nagel, ed.), (Berlin, Germany), pp. 683–691, IEEE Computer Society Press, May 1993.

K. Pahlavan, T. Uhlin, and J.-O. Eklundh, "Dynamic fixation", in *Proc. 4th International Conference on Computer Vision* (H-H. Nagel, ed.), (Berlin, Germany), pp. 412–419, IEEE Computer Society Press, May 1993.

W. Zhang and F. Bergholm, "An extension of Marr's signature based edge classification and other methods for determination of diffuseness and height of edges, as well as line width", in *Proc. 4th International Conference on Computer Vision* (H-H. Nagel, ed.), (Berlin, Germany), pp. 183–191, IEEE Computer Society Press, May 1993.

L. Olsson and H. Winroth, "Object-oriented computational networks for computer vision applications", in *TOOLS 10* (B. Magnusson, B. Meyer, and J.-F. Perrot, eds.), (Versailles, France), pp. 223–233, Prentice Hall, Mar. 1993.

K. Pahlavan and J.-O. Eklundh, "Head, eyes and head-eye systems", in *Active Robot Vision* (H. I. Christensen, K. W. Bowyer, and H. Bunke, eds.), vol. 6 of *Machine Perception Artificial Intelligence*, pp. 33–49, World Scientific, Feb. 1993.

K. Pahlavan, T. Uhlin, and J.-O. Eklundh, "Fixation by dynamic accommodation", in *Proc. SPIE Conf. on Intelligent Robots and Machine Vision*, vol. 1825, (Cambridge, Mass., USA), pp. 670–684, Nov. 1992.

S. Carlsson, "Conic primitives for projectively invariant representation of planar curves", in *Shape in Picture: Mathematical Description of Shape in Grey-Level Images* (Y. O. Ying, A. Toet, D. Foster, H. Heijmanns, and P. Meer, eds.), vol. 126 of *NATO ASI Series F*, pp. 403–414, Springer Verlag, Berlin, 1994.

T. Lindeberg, "Scale-space for N-dimensional discrete signals", in *Shape in Picture: Mathematical Description of Shape in Grey-Level Images* (Y. O. Ying, A. Toet, D. Foster, H. Heijmanns, and P. Meer, eds.), vol. 126 of *NATO ASI Series F*, pp. 571–590, Springer Verlag, Berlin, 1994. (Also available in Tech. Rep. ISRN KTH/NA/P–92/26–SE from Royal Inst of Technology).

T. Lindeberg, "Scale-space behaviour and invariance properties of differential singularities", in *Shape in Picture: Mathematical Description of Shape in Grey-Level Images* (Y. O. Ying, A. Toet, D. Foster, H. Heijmanns, and P. Meer, eds.), vol. 126 of *NATO ASI Series F*, pp. 591–600, Springer Verlag, Berlin, 1994. (Also available in Tech. Rep. ISRN KTH/NA/P–92/26–SE from Royal Inst of Technology).

A. Francisco, "Vergence micromovements and depth perception", in *Proc. British Machine Vision Conference* (D. Hogg and R. Boyle, eds.), (Leeds, U. K.), pp. 367–376, Springer Verlag, Berlin, Sept. 1992.

K. Pahlavan, T. Uhlin, and J.-O. Eklundh, "Active vision as a methodology", in *Active Vision* (Y. Aloimonos, ed.), Advances in Computer Science, pp. 19–46, Lawrence Erlbaum Associates, 1993.

J.-O. Eklundh, J. Gårding, T. Lindeberg, and F. Bergholm, "Extraction of shape features and experiments on cue integration", in *Artificial and Biological Vision Systems* (G. Orban and H. H. Nagel, eds.), pp. 350–379, Springer Verlag, Berlin, 1992. Also ISRN KTH/NA/P--9204--SE.

K. Brunnström, T. Lindeberg, and J.-O. Eklundh, "Active detection and classification of junctions by foveation with a head-eye system guided by the scale-space primal sketch", in *Proc. 2nd European Conference on Computer Vision* (G. Sandini, ed.), vol. 588 of *Lecture Notes in Computer Science*, (Santa Margherita Ligure, Italy), pp. 701–709, Springer Verlag, Berlin, May 1992.

J. Gårding, "Shape from texture for smooth curved surfaces", in *Proc. 2nd European Conference on Computer Vision* (G. Sandini, ed.), vol. 588 of *Lecture Notes in Computer Science*, pp. 630–638, Springer Verlag, Berlin, May 1992.

K. Pahlavan, T. Uhlin, and J.-O. Eklundh, "Integrating primary ocular processes", in *Proc. 2nd European Conference on Computer Vision* (G. Sandini, ed.), vol. 588 of *Lecture Notes in Computer Science*, (Santa Margherita Ligure, Italy), pp. 526–541, Springer Verlag, Berlin, May 1992.

K. Pahlavan and J.-O. Eklundh, "Head, eyes, and head-eye systems", in *Proc. SPIE Machine Vision and Robotics Conference*, (Orlando, Fl., USA), pp. 14–25, Apr. 1992.

M. Andersson and A. Lundquist, "Tracking lines in a stereo image sequence", in *Proc. 7th Scandinavian Conference on Image Analysis*, (Aalborg, Denmark), pp. 88–97, Aug. 1991. Also in *Theory and Applications of Image Analysis,* Selected Papers from the 7th Scandinavian Conference on Image Analysis, pp. 211–222, (P. Johansen and S. Olsen, eds.), World Scientific Publishing, Singapore, 1992.

S. Carlsson, “Recursive estimation of ego-motion and scene structure from a moving platform”, in *Proc. 7th Scandinavian Conference on Image Analysis*, (Aalborg, Denmark), pp. 958–965, Aug. 1991.

T. Lindeberg, “On the behaviour in scale-space of local extrema and blobs”, in *Proc. 7th Scandinavian Conference on Image Analysis*, (Aalborg, Denmark), pp. 8–17, Aug. 1991. Also in *Theory and Applications of Image Analysis,* Selected Papers from the 7th Scandinavian Conference on Image Analysis, pp. 38–47, (P. Johansen and S. Olsen, eds.), World Scientific Publishing, Singapore, 1992.

W. Zhang and F. Bergholm, “An extension of Marr’s “signature” based edge classification”, in *Proc. 7th Scandinavian Conference on Image Analysis*, (Aalborg, Denmark), pp. 435–443, Aug. 1991.

P. Lodola, J.-O. Eklundh, M. Andersson, and M. Berthod, “Stereovision and motion for advanced space robotics”, in *Proc. First ESA Workshop on Computer Vision and Image Processing for Spaceborne Applications*, (Noordwijk, Netherlands), June 1991.

M. Andersson and A. Lundquist, “Tracking lines in a stereo image sequence”, in *Proc. First ESA Workshop on Computer Vision and Image Processing for Spaceborne Applications*, (Noordwijk, Netherlands), June 1991.

S. Carlsson, “Projectively invariant decomposition of planar shapes”, in *Geometric Invariance in Computer Vision* (J. Mundy and A. Zisserman, eds.), pp. 267–276, MIT Press, 1992. Also ISRN KTH/NA/P--9121--SE.

J.-O. Eklundh, T. Lindeberg, and H. Winroth, “Qualitative shape – some computational aspects”, in *Visual Form* (C. Arcelli, L. P. Cordella, and G. Sanniti di Baja, eds.), pp. 231–248, Plenum Press, New York, 1992. (Proc. Int. Workshop on Visual Form, Capri, Italy, May 1991).

F. Bergholm, “Decomposition theory and transformations of visual directions”, in *Proc. 3rd International Conference on Computer Vision*, (Osaka, Japan), pp. 85–90, Dec. 1990.

T. Lindeberg and J.-O. Eklundh, “Scale detection and region extraction from a scale-space primal sketch”, in *Proc. 3rd International Conference on Computer Vision*, (Osaka, Japan), pp. 416–426, Dec. 1990.

T. Lindeberg and J.-O. Eklundh, “Construction of a scale-space primal sketch”, in *Proc. British Machine Vision Conference*, (Oxford), pp. 97–102, Sept. 1990.

J. Gårding, “Shape from texture and contour by weak isotropy”, in *Proc. 10th International Conference on Pattern Recognition*, (Atlantic City, N. J.), pp. 324–330, June 1990.

S. Carlsson and J.-O. Eklundh, “Object detection using model based prediction and motion parallax”, in *Vision Based Vehicle Guidance* (I. Masaki, ed.), pp. 148–161, Springer Verlag, Berlin, 1991.

S. Carlsson and J.-O. Eklundh, “Object detection using model based prediction and motion parallax”, in *Proc. 1st European Conference on Computer Vision*

(O. Faugeras, ed.), vol. 427 of *Lecture Notes in Computer Science*, pp. 297–306, Springer Verlag, Berlin, Apr. 1990. (Antibes, France).

K. Brunnström, J.-O. Eklundh, and T. Lindeberg, "On scale and resolution in the analysis of local image structure", in *Proc. 1st European Conference on Computer Vision* (O. Faugeras, ed.), vol. 427 of *Lecture Notes in Computer Science*, pp. 3–12, Springer Verlag, Berlin, Apr. 1990. (Antibes, France).

J.-O. Eklundh, "Information integration and model selection in computer vision", in *Proc. NATO Advanced Research Workshop on Multisensor Fusion in Computer Vision*, (Grenoble), June 1989. NATO ASI Series F, vol. 99 (J. Aggarwal ed.) pp 3-13 Springer Verlag, Berlin1993.

K. Brunnström, J.-O. Eklundh, and A. Kakimoto, "On focus-of-attention by active focusing", in *Proc. NATO ASI on Active Perception and Robot Vision*, (Maratea), Springer Verlag, Berlin, July 1989.

M. Andersson, J.-O. Eklundh, and A. Kakimoto, "Rigid body motion analysis from the correspondence of interest points", in *Proc. 6th Scandinavian Conference on Image Analysis*, (Oulo, Finland), pp. 786–791, June 1989.

A. Bengtsson and J.-O. Eklundh, "Shape representation by multi-scale contour approximation", in *Proc. 6th Scandinavian Conference on Image Analysis*, (Oulo, Finland), pp. 252–261, June 1989.

F. Bergholm, "Classification of edges in time-varying imagery", in *Proc. 6th Scandinavian Conference on Image Analysis*, (Oulo, Finland), pp. 552–560, June 1989.

J. Gårding, "Estimating the orientation of multiple textured planes", in *Proc. 6th Scandinavian Conference on Image Analysis*, (Oulo, Finland), pp. 228–236, June 1989.

T. Lindeberg, "Scale space for discrete images", in *Proc. 6th Scandinavian Conference on Image Analysis*, (Oulo, Finland), pp. 1098–1107, June 1989.

F. Bergholm, "A theory of optical flow", in *Proc. 2nd International Conference on Computer Vision*, (Tarpon Springs, Fl.), pp. 165–176, Dec. 1988.

K. Brunnström, J.-O. Eklundh, and G. Olofsson, "Hypotheses of geometric structure generated in an active vision system", in *Proc. IAPR Workshop on Computer Vision*, (Tokyo), pp. 62–65, 1988.

A. M. Waxman, J. Wu, and F. Bergholm, "Convected activation profiles and the measurement of visual motion", in *Proc. CVPR 88*, (Ann Arbor), pp. 717–723, IEEE Computer Society Press, June 1988.

Ö. Ekeberg and A. Lansner, "Associative networks: I A Bayesian learning rule. II Complex nodes", in *Proc. Seventh Int. Congress of Cybernetics and Systems*, (London), Sept. 1987.

F. Sjöberg and F. Bergholm, "Extraction of diffuse edges by edge focusing", in *Proc. 5th Scandinavian Conference on Image Analysis*, (Stockholm), pp. 22–34, June 1987.

L. Svensson and A. Naeve, "Estimating the N-dimensional motion of an (N-1)-dimensional hyperplane from two matched images of N+1 points", in *Proc. 5th Scandinavian Conference on Image Analysis*, (Stockholm), pp. 605–622, June 1987.

K. Brunnström and M. Ishizuka, "Target-directed understanding of 3D objects in a knowledge-based vision system", in *Proc. 5th Scandinavian Conference on Image Analysis*, (Stockholm), pp. 201–208, June 1987.

A. Naeve and J.-O. Eklundh, "On projective geometry and the recovery of 3-D structure", in *Proc. 1st International Conference on Computer Vision*, (London), pp. 128–135, June 1987.

K. Brunnström, M. Ishizuka, and T. Hama, "Knowledge-based 3D vision system using a modeling with class concept", in *Proc. International Workshop on Industrial Applications of Machine Vision and Machine Intelligence*, (Tokyo, Japan), pp. 138–143, Feb. 1987.

Ö. Ekeberg and A. Lansner, "An associative network solving the 4-bit adder problem", in *Proc. IEEE First Annual International Conference on Neural Networks (vol II)*, (San Diego, Ca.), Jan. 1987.

J.-O. Eklundh, A. Lansner, and R. Wessblad, "Classification of multispectral images using associative nets", in *Proc. 8th International Conference on Pattern Recognition*, (Paris), pp. 1240–1243, IEEE Computer Society Press, Oct. 1986. Also TRITA-NA-8519.

F. Bergholm, "Edge focusing", in *Proc. 8th International Conference on Pattern Recognition*, (Paris), pp. 597–600, IEEE Computer Society Press, Oct. 1986. Also TRITA-NA-8519.

F. Bergholm, J.-O. Eklundh, and J. Howako, "Finding geometric structure", in *Proc. 4th Scandinavian Conference on Image Analysis*, (Trondheim), pp. 753–760, June 1985.

A. Lansner, "Pattern processing in a multilayer associative net", in *Proc. 4th Scandinavian Conference on Image Analysis*, (Trondheim), pp. 831–838, June 1985.

A. Lansner, "Associative processing in brain theory and artificial intelligence", in *Brain Theory, Proc. First Trieste Meeting on Brain Theory* (Palm and Aertsen, eds.), Oct. 1984. Also TRITA-NA-8508 (Integral 37).

J.-O. Eklundh and J. Howako, "Robust shape description based on curve fitting", in *Proc. 7th International Conference on Pattern Recognition*, (Montreal), pp. 109–112, IEEE Computer Society Press, July 1984.

A. Lansner, "Pattern recognition in an adaptive associative network", in *Proc of the First ESSCS Workshop on Cognitive Systems*, (Nordwijkerhout, Holland), 1983.

J.-O. Eklundh, "A structured approach to segmentation of aerial photographs", *Applications of Digital Image Processing, Proc. SPIE*, vol. 397, pp. 21–27, Apr. 1983.