

Research outputs

Listing of Research outputs

2020

Comparison of manual and machine learning image processing approaches to determine fungiform papillae on the tongue

Cattaneo, C., Liu, J., Wang, C., Pagliarini, E., Sparring, J. & Bredie, W., 2020, In : Scientific Reports. 10, 15 p., 18694.

Research output: Contribution to journal › Journal article › Research › peer-review

A Highly Accurate Model Based Registration Method for FIB-SEM Images of Neurons

Stephensen, H. J. T., Darkner, S. & Sparring, J., 2020, 8 p. (arXiv.org).

Research output: Book/Report › Report

Measuring shape relations using r-parallel sets

Stephensen, H. J. T., Svane, A. M., Villanueva, C. B., Goldman, S. A. & Sparring, J., 10 Aug 2020, arXiv.org. 10 p.

Research output: Book/Report › Report

Restoring drifted electron microscope volumes using synaptic vesicles at sub-pixel accuracy

Stephensen, H. J. T., Darkner, S. & Sparring, J., 2020, In : Communications Biology. 3, 1, 7 p., '81.

Research output: Contribution to journal › Journal article › Research › peer-review

A Novel Approach to Tongue Standardization and Feature Extraction

Wang, C., Cattaneo, C., Liu, J., Bredie, W., Pagliarini, E. & Sparring, J., 2020, *Medical Image Computing and Computer Assisted Intervention – MICCAI 2020: 23rd International Conference, Proceedings*. Martel, A. L., Abolmaesumi, P., Stoyanov, D., Mateus, D., Zuluaga, M. A., Zhou, S. K., Racoceanu, D. & Joskowicz, L. (eds.). Springer, p. 36-45 (Lecture Notes in Computer Science, Vol. 12265 LNCS).

Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings › Research › peer-review

Morphology on categorical distributions

Ørting, S. N., Stephensen, H. J. T. & Sparring, J., 14 Dec 2020, arXiv.org.

Research output: Book/Report › Report

2019

Muscle fibre morphology and microarchitecture in cerebral palsy patients obtained by 3D synchrotron X-ray computed tomography

Borg, L., Sparring, J., Dam, E. B., Dahl, V. A., Dyrby, T. B., Feidenhans'l, R., Dahl, A. B. & Pingel, J., 2019, In : Computers in Biology and Medicine. 107, p. 265-269 5 p.

Research output: Contribution to journal › Journal article › Research › peer-review

Experimental cerebral malaria is associated with profound loss of both glycan and protein components of the endothelial glycocalyx

Hempel, C., Sparring, J. & Kurtzhals, J., 2019, In : F A S E B Journal. 33, 2, p. 2058-2071

Research output: Contribution to journal › Journal article › Research › peer-review

Using a high-level parallel programming language for GPU-accelerated tomographic reconstruction

Lindhøj, M. B., Henriksen, T., Pedersen, L. & Sparring, J., 15 Jul 2019, *The 2019 International Conference on High Performance Computing & Simulation: HPCS 2019*. IEEE, p. 27-32 6 p. 3

Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings › Research › peer-review

Generalizations of Ripley's K-function with Application to Space Curves

Sparring, J., Waagepetersen, R. P. & Sommer, S. H., Jun 2019, *Information Processing in Medical Imaging - 26th International Conference, IPMI 2019, Hong Kong, China, 2019, Proceedings: 26th International Conference, IPMI 2019, Hong Kong, China, June 2-7, 2019, Proceedings*. Springer, p. 731-742 (Lecture Notes in Computer Science, Vol. 11492).

Drift Corrector Software

Stephensen, H. J. T., Darkner, S. & Sparring, J., 20 Aug 2019

Research output: Non-textual form › Computer programme › Research

2018

Collocation for diffeomorphic deformations in medical image registration

Darkner, S., Pai, A. S. U., Liptrot, M. G. & Sparring, J., 2018, In : *IEEE Transactions on Pattern Analysis and Machine Intelligence*. 40, 7, p. 1570-1583

Research output: Contribution to journal › Journal article › Research › peer-review

Estimating the continuous entropy of a discrete set of orientations in R3

Sparring, J., 2018, Copenhagen: Department of Computer Science, University of Copenhagen. 6 p. (Technical Report; No. 1, Vol. 2018).

Research output: Book/Report › Report

2017

Reducing artifacts from varying projection truncations

Borg, L., Jørgensen, J. S., Friel, J., Quinto, E. T. & Sparring, J., 2017. 2 p.

Research output: Contribution to conference › Paper › Research › peer-review

Reduction of variable-truncation artifacts from beam occlusion during *in situ* x-ray tomography

Borg, L., Jørgensen, J. S., Friel, J. & Sparring, J., Dec 2017, In : *Measurement Science and Technology*. 28, 12, 19 p., 124004.

Research output: Contribution to journal › Journal article › Research › peer-review

Towards characterizing and reducing artifacts caused by varying projection truncation

Borg, L., Jørgensen, J. S. & Sparring, J., 24 Feb 2017, Department of Computer Science, University of Copenhagen. 42 p. (Datalogisk Institut. Københavns Universitet. Technical Reports; No. 1, Vol. 2017).

Research output: Book/Report › Report

3D analysis of synaptic vesicle density and distribution after acute foot-shock stress by using serial section transmission electron microscopy

Khanmohammadi, M., Darkner, S., Nava, N., Nyengaard, J. R., Wegener, G., Popoli, M. & Sparring, J., 2017, In : *Journal of Microscopy*. 265, 1, p. 101-110 10 p.

Research output: Contribution to journal › Journal article › Research › peer-review

Synchrotron radiation μ CT and histology evaluation of bone-to-implant contact

Neldam, C. A., Sparring, J., Rack, A., Lauridsen, T., Hauge, E. M., Jørgensen, H. L., Jørgensen, N. R., Feidenhans'l, R. K. & Pinholt, E. M., Sep 2017, In : *Journal of Cranio-Maxillofacial Surgery*. 45, 9, p. 1448-1457 10 p.

Research output: Contribution to journal › Journal article › Research › peer-review

Estimation of sample spacing in stochastic processes

Rønn-Nielsen, A., Sparring, J. & Jensen, E. B. V., 2017, In : *Image Analysis and Stereology*. 36, 1, p. 43-49 7 p.

Research output: Contribution to journal › Journal article › Research › peer-review

2016

Combining the boundary shift integral and tensor-based morphometry for brain atrophy estimation

Michalkiewicz, M. D., Pai, A. S. U., Leung, K. K., Sommer, S. H., Darkner, S., Sørensen, L., Sparring, J. & Nielsen, M., 2016, *Medical imaging 2016: Image processing*. Styner, M. A. & Angelini, E. D. (eds.). SPIE - International Society for Optical Engineering, 6 p. 978406. (Progress in Biomedical Optics and Imaging).

Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings › Research › peer-review

Deformation-based atrophy computation by surface propagation and its application to Alzheimer's disease

Pai, A. S. U., Sporring, J., Darkner, S., Dam, E. B., Lillholm, M., Jørgensen, D., Oh, J., Chen, G., Suhy, J., Sørensen, L. & Nielsen, M., 2016, In : SPIE Journal of Medical Imaging. 3, 1, 11 p., 014005.

Research output: Contribution to journal › Journal article › Research › peer-review

Kernel bundle diffeomorphic image registration using stationary velocity fields and Wendland basis functions

Pai, A. S. U., Sommer, S. H., Sørensen, L., Darkner, S., Sporring, J. & Nielsen, M., 2016, In : IEEE transactions on medical imaging. 35, 6, p. 1369-1380 12 p.

Research output: Contribution to journal › Journal article › Research › peer-review

Recovery of missing information in diffusion magnetic resonance imaging data

Siddiqi, K., Piuze-Phaneuf, E. & Sporring, J., 2016, Patent No. US 2016/0335786 A1, 17 Nov 2016

Research output: Patent

2015

Analysis of shape and spatial interaction of synaptic vesicles using data from focused ion beam scanning electron microscopy (FIB-SEM)

Khanmohammadi, M., Waagepetersen, R. P. & Sporring, J., 2015, In : Frontiers in Neuroanatomy. 9, 11 p., 116.

Research output: Contribution to journal › Journal article › Research › peer-review

Connection forms for beating the heart

Mensch, A., Piuze, E., Lehnert, L., Backermans, A. J., Sporring, J., Strijkers, G. J. & Siddiqi, K., 2015, *Statistical Atlases and Computational Models of the Heart - Imaging and Modelling Challenges: 5th International Workshop, STACOM 2014, Held in Conjunction with MICCAI 2014, Boston, MA, USA, September 18, 2014, Revised Selected Papers*. Camara, O., Mansi, T., Pop, M., Rhode, K., Sermesant, M. & Young, A. (eds.). Springer, p. 83-92 10 p. (Lecture notes in computer science, Vol. 8896).

Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings › Research › peer-review

Adaptive time-stepping in diffeomorphic image registration with bounded inverse consistency error

Pai, A. S. U., Klein, S., Sommer, S. H., Sørensen, L., Darkner, S., Sporring, J. & Nielsen, M., 2015, *Proceedings of the fifth international workshop on Mathematical Foundations of Computational Anatomy (MFCA 2015)*. INRIA, p. 35-47

Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings › Research › peer-review

Adaptive time-stepping in diffeomorphic image registration with bounded inverse consistency error

Pai, A. S. U., Klein, S., Sommer, S. H., Sørensen, L. E. B. L., Darkner, S., Sporring, J. & Nielsen, M., 2015, *The 18th International Conference on Medical Image Computing and Computer Assisted Intervention: proceedings*. Technische Universität München, p. 35-47 13 p.

Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings › Research › peer-review

Comparison of several computational pipelines for atrophy computation in longitudinal Alzheimers studies

Pai, A. S. U., Sommer, S. H., Darkner, S., Sørensen, L. E. B. L., Sporring, J. & Nielsen, M., 2015. 1 p.

Research output: Contribution to conference › Conference abstract for conference › Research › peer-review

Diffeomorphic image registration with automatic time-step adjustment

Pai, A. S. U., Klein, S., Sommer, S. H., Darkner, S., Sporring, J. & Nielsen, M., 2015, *Biomedical Imaging (ISBI), 2015 IEEE 12th International Symposium on*. IEEE, p. 1085-1088 4 p.

Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings › Research › peer-review

Image registration using stationary velocity fields parameterized by norm-minimizing Wendland kernel

Pai, A. S. U., Sommer, S. H., Sørensen, L., Darkner, S., Sporring, J. & Nielsen, M., 2015. 1 p.

Research output: Contribution to conference › Conference abstract for conference › Research › peer-review

Maurer-cartan forms for fields on surfaces: application to heart fiber geometry

Piuze, E., Sporring, J. & Siddiqi, K., 2015, In : IEEE Transactions on Pattern Analysis and Machine Intelligence. 37, 12, p. 2492-2504 13 p.

Moving frames for heart fiber reconstruction

Piuze, E., Spurring, J. & Siddiqi, K., 2015, *Information Processing in Medical Imaging: 24th international conference, IPMI 2015, Sabhal Mor Ostaig, Isle of Skye, UK, June 28 - July 3, 2015, Proceedings*. Ourselin, S., Alexander, D. C., Westin, C-F. & Cardoso, M. J. (eds.). Springer, p. 527-539 13 p. (Lecture notes in computer science, Vol. 9123).

Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings › Research › peer-review

Method of modelling and characterising heart fiber geometry, involves determining whether new fitting energy meets predetermined threshold when predetermined threshold is met iterative process is terminated

Siddiqi, K., Piuze-Phaneuf, E., Spurring, J., Savadjiev, P., Strijkers, G. & Zucker, S., 2015, IPC No. G06T-011/00, Patent No. US2015332483-A1, 19 Nov 2015, Priority date 15 May 2014, Priority No. US993600P

Research output: Patent

Matematik på hjertet: bedre diagnosticering af hjertesygdomme

Spurring, J., 2015, *Naturen i computeren*. Det Natur- og Biovidenskabelige Fakultet, Københavns Universitet, p. 12-13 2 p. (Temahæfte, Vol. 2015).

Research output: Chapter in Book/Report/Conference proceeding › Book chapter › Education

Novel approach to measure the size of plasma-membrane nanodomains in single molecule localization microscopy

Ziomkiewicz, I., Spurring, J., Günther-Pomorski, T. & Schulz, A., 2015, In : *Cytometry. Part A*. 87, 9, p. 868-877 10 p.

Research output: Contribution to journal › Journal article › Research › peer-review

2014

Photon differential splatting for rendering caustics

Frisvad, J. R., Schjøth, L., Erleben, K. & Spurring, J., 2014, In : *Computer Graphics Forum*. 33, 6, p. 252-263 12 p.

Research output: Contribution to journal › Journal article › Research › peer-review

Analysing the distribution of synaptic vesicles using a spatial point process model

Khanmohammadi, M., Waagepetersen, R., Nava, N., Nyengaard, J. & Spurring, J., 2014, *Proceedings of the 5th ACM Conference on Bioinformatics, Computational Biology, and Health Informatics*. Association for Computing Machinery, p. 73-78 6 p.

Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings › Research › peer-review

Stepwise inverse consistent Euler's scheme for diffeomorphic image registration

Pai, A. S. U., Sommer, S. H., Darkner, S., Sørensen, L., Spurring, J. & Nielsen, M., 2014, *Biomedical Image Registration: 6th International Workshop, WBIR 2014, London, UK, July 7-8, 2014. Proceedings*. Ourselin, S. & Modat, M. (eds.). Springer, p. 223-230 8 p. (Lecture notes in computer science, Vol. 8545).

Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings › Research › peer-review

White matter hypointensity growth rate correlates with rate of brain atrophy

Pai, A. S. U., Sørensen, L., Darkner, S., Spurring, J., Rostrup, E. & Nielsen, M., 2014, In : *Alzheimer's & Dementia*. 10, 4, Supplement, p. P75-P76 2 p., IC-P-131.

Research output: Contribution to journal › Conference abstract in journal › Research › peer-review

White matter hypointensity growth rate correlates with rate of brain atrophy

Pai, A. S. U., Sørensen, L., Darkner, S., Spurring, J., Rostrup, E. & Nielsen, M., 2014, In : *Alzheimer's & Dementia*. 10, 4, Supplement, p. P414 1 p., P1-285.

Research output: Contribution to journal › Conference abstract in journal › Research › peer-review

Estimating the thickness of ultra thin sections for electron microscopy by image statistics

Spurring, J., Khanmohammadi, M., Darkner, S., Nava, N., Nyengaard, J. R. & Jensen, E. B. V., 2014, *2014 IEEE International Symposium on Biomedical Imaging*. IEEE, p. 157-160 4 p.

Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings › Research › peer-review

2013

Locally orderless registration

Darkner, S. & Sporring, J., 2013, In : *IEEE Transactions on Pattern Analysis and Machine Intelligence*. 35, 6, p. 1437-1450 14 p.

Research output: Contribution to journal › Journal article › Research › peer-review

3D estimation of synaptic vesicle distributions in serial section transmission electron microscopy

Khanmohammadi, M., Darkner, S., Nava, N., Nyengaard, J. R. & Sporring, J., 8 Jun 2013. 1 p.

Research output: Contribution to conference › Conference abstract for conference › Research › peer-review

Evaluation of WBAA with registration-based cube propagation for brain atrophy quantification

Lillholm, M., Pai, A. S. U., Sørensen, L., Nielsen, M., Sporring, J., Darkner, S. & Dam, E., 2013. 1 p.

Research output: Contribution to conference › Conference abstract for conference › Research › peer-review

Diffeomorphic spectral matching of cortical surfaces

Lombaert, H., Sporring, J. & Siddiqi, K., 2013, *Information Processing in Medical Imaging: 23rd International Conference, IPMI 2013, Asilomar, CA, USA, June 28–July 3, 2013. Proceedings*. Gee, J. C., Joshi, S., Pohl, K. M., Wells, W. M. & Zöllei, L. (eds.). Springer, p. 376-389 14 p. (Lecture notes in computer science, Vol. 7917).

Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings › Research › peer-review

Automatic measurement of wrist synovitis from contrast-enhanced MRI: a registration-centered approach

Mysling, P., Darkner, S., Sporring, J., Dam, E. & Lillholm, M., 2013, *Medical Imaging 2013: Image Processing*. Ourselin, S. & Haynor, D. R. (eds.). SPIE - International Society for Optical Engineering, 6 p. 86692U. (Progress in Biomedical Optics and Imaging; No. 36, Vol. 14).

Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings › Research › peer-review

Cube propagation for focal brain atrophy estimation

Pai, A. S. U., Sørensen, L., Darkner, S., Mysling, P., Jørgensen, D. R., Dam, E. B., Lillholm, M., Oh, J., Chen, G., Suhy, J., Sporring, J. & Nielsen, M., 2013, *2013 IEEE 10th International Symposium on Biomedical Imaging*. IEEE, p. 402-405 4 p.

Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings › Research › peer-review

Hippocampus atrophy in early Alzheimer's disease quantified using non-rigid registration with cube propagation

Pai, A. S. U., Sørensen, L. E. B. L., Mysling, P., Erleben, L. L., Sporring, J., Dam, E., Lillholm, M., Jørgensen, D. R., Chen, G., Oh, J., Suhy, J. & Nielsen, M., 2013.

Research output: Contribution to conference › Conference abstract for conference › Research › peer-review

Localized cerebral atrophy acceleration during Alzheimer's disease

Pai, A. S. U., Sørensen, L., Darkner, S., Lillholm, M., Dam, E. B., Sporring, J. & Nielsen, M., 2013, In : *Alzheimer's & Dementia*. 9, 4, Supplement, p. P151 1 p., O1-10-06.

Research output: Contribution to journal › Conference abstract in journal › Research › peer-review

Localized cerebral atrophy acceleration during Alzheimer's disease

Pai, A. S. U., Sørensen, L., Darkner, S., Lillholm, M., Dam, E. B., Sporring, J. & Nielsen, M., 2013, In : *Alzheimer's & Dementia*. 9, 4, Supplement, p. P36–P37 2 p., IC-P-059.

Research output: Contribution to journal › Conference abstract in journal › Research › peer-review

Atlases of cardiac fiber differential geometry

Piuzé, E., Lombaert, H., Sporring, J., Strijkers, G. J., Bakermans, A. J. & Siddiqi, K., 2013, *Functional Imaging and Modeling of the Heart: 7th International Conference, FIMH 2013, London, UK, June 20-22, 2013. Proceedings*. Ourselin, S., Rueckert, D. & Smith, N. (eds.). Springer, p. 442-449 8 p. (Lecture notes in computer science, Vol. 7945).

Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings › Research › peer-review

Cardiac fiber inpainting using cartan forms

Piuzé, E., Lombaert, H., Sporring, J. & Siddiqi, K., 2013, *Medical Image Computing and Computer-Assisted Intervention – MICCAI 2013: 16th International Conference, Nagoya, Japan, September 22-26, 2013, Proceedings, Part II*. Moru, K., Sakuma, I., Sato, Y., Barillot, C. & Navab, N. (eds.). Springer, p. 509-517 9 p. (Lecture notes in computer science, Vol. 8150).

Moving frames for heart fiber geometry

Piuzé, E., Sporring, J. & Siddiqi, K., 2013, *Information Processing in Medical Imaging: 23rd International Conference, IPMI 2013, Asilomar, CA, USA, Proceedings*. Gee, J. C., Joshi, S., Pohl, K. M., Wells, W. M. & Zöllei, L. (eds.). Springer, p. 524-535 12 p. (Lecture notes in computer science, Vol. 7917).

Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings › Research › peer-review

Truncation error for simplex propagation

Sporring, J., 2013, Datalogisk Institut. 8 p. (Københavns Universitet. Datalogisk Institut. Rapport; No. 01/2013).

Research output: Book/Report › Report

2012

Locally orderless registration code: fast normalized mutual information and P-Norm for MATLAB

Darkner, S. & Sporring, J., 2012

Research output: Non-textual form › Computer programme › Research

Mass preserving image registration for lung CT

Gorbunova, V., Sporring, J., Lo, P. C. P., Loeve, M., Tiddens, H. A., Nielsen, M., Dirksen, A. & de Bruijne, M., 2012, In : *Medical Image Analysis*. 16, 4, p. 786-795 10 p.

Research output: Contribution to journal › Journal article › Research › peer-review

Maximum a posteriori covariance estimation using a power inverse wishart prior

Nielsen, S. F. & Sporring, J., 2012, 29 p. (arXiv.org: Statistics).

Research output: Book/Report › Report

Evaluation of bias in brain atrophy estimation

Pai, A. S. U., Darkner, S., Sørensen, L., Erleben, L. L., Mysling, P., Sporring, J., Dam, E. & Nielsen, M., 2012, *NIBAD '12: MICCAI 2012 Workshop on Novel Imaging Biomarkers for Alzheimer's Disease and Related Disorders*. Wang, L., Yushkevich, P. & Ourselin, S. (eds.). MICCAI, p. 198-206 9 p.

Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings › Research › peer-review

2011

Maximum a posteriori estimation of linear shape variation with application to vertebra and cartilage modeling

Crimi, A., Lillholm, M., Nielsen, M., Ghosh, A., de Bruijne, M., Dam, E. B. & Sporring, J., 2011, In : *IEEE transactions on medical imaging*. 30, 8, p. 1514-1526 13 p.

Research output: Contribution to journal › Journal article › Research › peer-review

Generalized Partial Volume: an inferior density estimator to Parzen Windows for normalized mutual information

Darkner, S. & Sporring, J., 2011, *Information Processing in Medical Imaging: 22nd International Conference, IPMI 2011, Kloster Irsee, Germany, July 3-8, 2011. Proceedings*. Székely, G. & Hahn, H. K. (eds.). Springer, p. 436-447 12 p. (Lecture notes in computer science, Vol. 6801).

Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings › Research › peer-review

Evaluation of registration methods on thoracic CT: the EMPIRE10 challenge

Murphy, K., van Ginneken, B., Reinhardt, J., Kabus, S., Ding, K., Deng, X., Cao, K., Du, K., Christensen, G., Garcia, V., Vercauteren, T., Ayache, N., Commowick, O., Malandain, G., Glocker, B., Paragios, N., Navab, N., Gorbunova, V., Sporring, J., de Bruijne, M., Han, X., Heinrich, M., Schnabel, J., Jenkinson, M., Lorenz, C., Modat, M., McClelland, J., Ourselin, S., Muenzing, S., Viergever, M., De Nigris, D., Collins, D., Arbel, T., Peroni, M., Li, R., Sharp, G., Schmidt-Richberg, A., Ehrhardt, J., Werner, R., Smeets, D., Loeckx, D., Song, G., Tustison, N., Avants, B., Gee, J., Staring, M., Klein, S., Stoel, B., Urschler, M., Werlberger, M., Vandemeulebroucke, J., Rit, S., Sarrut, D. & Pluim, J., 2011, In : *IEEE transactions on medical imaging*. 30, 11, p. 1901-1920 20 p.

Research output: Contribution to journal › Journal article › Research › peer-review

Jacobians for Lebesgue registration for a range of similarity measures

Sporring, J. & Darkner, S., 2011, Department of Computer Science, University of Copenhagen. 8 p. (Københavns Universitet. Datalogisk Institut. Rapport; No. 04/2011).

Research output: Book/Report > Report

2010

Mass preserving image registration: results of Evaluation of Methods for Pulmonary Image Registration 2010 Challenge

Gorbunova, V., Sporring, J., Lo, P. C. P., Dirksen, A. & de Bruijne, M., 2010, *Medical image analysis for the clinic: a grand challenge: workshop proceedings from the 13th International Conference on Medical Image Computing And Computer Assisted Intervention*. van Ginneken, B., Murphy, K., Heimann, T., Pekar, V. & Deng, X. (eds.). CreateSpace Independent Publishing Platform, p. 155-164 10 p.

Research output: Chapter in Book/Report/Conference proceeding > Article in proceedings > Research > peer-review

Anisotropic diffusion tensor applied to temporal mammograms: an application to breast cancer risk assessment

Karemore, G., Brandt, S., Sporring, J. & Nielsen, M., 2010, *2010 Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)*. IEEE, p. 3178-3181 4 p. (IEEE Engineering in Medicine and Biology Society. Conference Proceedings).

Research output: Chapter in Book/Report/Conference proceeding > Article in proceedings > Research > peer-review

Vessel-guided airway tree segmentation: a voxel classification approach

Lo, P. C. P., Sporring, J., Ashraf, H., Pedersen, J. J. H. & de Bruijne, M., 2010, In: *Medical Image Analysis*. 14, 4, p. 527-538 12 p.

Research output: Contribution to journal > Journal article > Research > peer-review

Photon differentials in space and time

Schjøth, L., Frisvad, J. R., Erleben, K. & Sporring, J., 2010, *Computer Vision, Imaging and Computer Graphics. Theory and Applications: International Joint Conference, VISIGRAPP 2010, Angers, France, May 17-21, 2010. Revised Selected Papers*. Richard, P. & Braz, J. (eds.). Springer, p. 274-286 13 p. (Communications in Computer and Information Science, Vol. 229).

Research output: Chapter in Book/Report/Conference proceeding > Article in proceedings > Research > peer-review

2009

Bayes estimation of shape model with application to vertebrae boundaries

Crimi, A., Ghosh, A., Sporring, J. & Nielsen, M., 2009, *Medical Imaging 2009: Image Processing (Proceedings Volume)*. Vol. 7259. 8 p.

Research output: Chapter in Book/Report/Conference proceeding > Article in proceedings > Research > peer-review

Prior knowledge regularization in statistical medical image tasks

Crimi, A., Sporring, J., de Bruijne, M., Lillholm, M. & Nielsen, M., 2009, *Proceedings of the MICCAI Workshop on Probabilistic Models for Medical Image Analysis*. 12 p.

Research output: Chapter in Book/Report/Conference proceeding > Article in proceedings > Research > peer-review

Mass Preserving Registration for lung CT

Gorbunova, V., Lo, P. C. P., Loeve, M., Tiddens, H., Sporring, J., Nielsen, M. & de Bruijne, M., 2009, *Proceedings of the SPIE: Medical Imaging 2009: Image Processing*. Vol. 7259. 10 p. (Proceedings of the SPIE, Vol. 7259).

Research output: Chapter in Book/Report/Conference proceeding > Article in proceedings > Research > peer-review

Airway Tree Extraction with Locally Optimal Paths

Lo, P. C. P., Sporring, J., Pedersen, J. J. H. & de Bruijne, M., 2009, *MICCAI 2009*. p. 51-58 8 p.

Research output: Chapter in Book/Report/Conference proceeding > Article in proceedings > Research > peer-review

Multiscale Vessel-guided Airway Tree Segmentation

Lo, P. C. P., Sporring, J. & de Bruijne, M., 2009, *Proceedings of Second International Workshop on Pulmonary Image Analysis*. Brown, M., de Bruijne, M., van Ginneken, B., Kiraly, A., Kuhnigk, J.-M., Lorenz, C., McClelland, J. R., Mori, K., Reeves, A. & Reinhardt, J. M. (eds.). CreateSpace, p. 323-332 10 p.

Research output: Chapter in Book/Report/Conference proceeding > Article in proceedings > Research > peer-review

Content-Aware Video Editing in the Temporal Domain

Slot, K., Truelsen, R. & Sporring, J., 2009, *Scandinavian Conference on Image Analysis (SCIA '09)*. 9 p.

Research output: Chapter in Book/Report/Conference proceeding > Article in proceedings > Research > peer-review

Spatial and Temporal Ray Differentials

Sporring, J., Schjøth, L. & Erleben, K., 2009, Department of Computer Science: Department of Computer Science, University of Copenhagen. 14 p. (Technical Report; No. 04, Vol. 2009).

Research output: Book/Report > Report

Learning COPD Sensitive Filters in Pulmonary CT

Sørensen, L. E. B. L., Lo, P. C. P., Ashraf, H., Sporring, J., Nielsen, M. & de Bruijne, M., 2009, *Medical Image Computing and Computer-Assisted Intervention - MICCAI 2009*. 7 p.

Research output: Chapter in Book/Report/Conference proceeding > Article in proceedings > Research > peer-review

2008

Vessel-guided airway segmentation based on voxel classification

Lo, P. C. P., Sporring, J., Ashraf, H., Holst Pedersen, J. J. & de Bruijne, M., 2008, *The first International Workshop on Pulmonary Image Analysis: New York, September 6, 2008*. Brown, M., de Bruijne, M., van Ginneken, B., Kiraly, A., Kuhnigk, J.-M., Lorenz, C., Mori, K. & Reinhardt, J. (eds.). Lulu.com, p. 113-122

Research output: Chapter in Book/Report/Conference proceeding > Article in proceedings > Research > peer-review

Voxel Classification Based Vessel-guided Airway Segmentation

Lo, P. C. P., Sporring, J., Ashraf, H., Pedersen, J. H. J. & de Bruijne, M., 2008, *Proceedings of the Danish Conference on Pattern Recognition and Image Analysis: Organised by Danish Society for Automatic Pattern Recognition (Dansk Selskab for automatisk genkendelse af mønstre), Department of Computer Science, University of Copenhagen, Thursday 21 August 2008*. Olsen, S. I. (ed.). Museum Tusculanum, p. 8-9 (Datalogisk Institut. Københavns Universitet. Technical Reports; No. 08-10).

Research output: Chapter in Book/Report/Conference proceeding > Article in proceedings > Research

Guessing tangents in normal flows

Markussen, B., Sporring, J. & Erleben, K., 2008, In : *Journal of Mathematical Imaging and Vision*. 31, 2-3, p. 195-205 11 p.

Research output: Contribution to journal > Journal article > Research > peer-review

Special Issue on Tribute Workshop for Peter Johansen

Nielsen, M., de Bruijne, M., Jørgensen, C. H., Olsen, S. I., Pedersen, K. S. & Sporring, J., 2008, In : *Journal of Mathematical Imaging and Vision*. 31, 2-3, p. 119-120

Research output: Contribution to journal > Editorial > Research

Tribute Workshop for Peter Johansen

Nielsen, M. (ed.), de Bruijne, M. (ed.), Jørgensen, C. H. (ed.), Olsen, S. I. (ed.), Pedersen, K. S. (ed.) & Sporring, J. (ed.), 2008, Berlin: Springer. 151 p. (*Journal of Mathematical Imaging and Vision*; No. 31(2-3)p.119-269).

Research output: Book/Report > Anthology

Diffusion Based Photon Mapping

Schjøth, L., Sporring, J. & Fogh Olsen, O., 2008, In : *Computer Graphics Forum*. 27, 8, p. 2114-2127 13 p.

Research output: Contribution to journal > Journal article > Research > peer-review

Bayes PCA Revisited

Sporring, J., 2008, Department of Computer Science: Museum Tusculanum. 12 p. (Department of Computer Science. University of Copenhagen. Technical Report; No. 08-09).

Research output: Book/Report > Report

Bayes reconstruction of missing teeth

Sporring, J. & Jensen, K. H., 2008, In : *Journal of Mathematical Imaging and Vision*. 13, 2-3, p. 245-254

2007

Line-Stepping for Shell Meshes

Erleben, K. & Sparring, J., 2007, *Image Analysis: 15th Scandinavian Conference, SCIA 2007, Aalborg, Denmark, June 10-14, 2007*. Ersbøll, B. K. & Pedersen, K. S. (eds.). Springer, p. 472-481 (Lecture notes in computer science; No. 4522).

Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings › Research › peer-review

Reconstructing teeth with bite information

Hommelhoff Jensen, K. & Sparring, J., 2007, *Image Analysis: 15th Scandinavian Conference, SCIA 2007, Aalborg, Denmark, June 10-14, 2007*. Kjær Ersbøll, B. & Steenstrup Pedersen, K. (eds.). Springer, p. 102-111 (Lecture notes in computer science; No. 4522).

Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings › Research › peer-review

Diffusion Based Photon Mapping

Schjøth, L., Fogh Olsen, O. & Sparring, J., 2007, *Advances in Computer Graphics and Computer Vision: International conferences, VISAPP and GRAPP 2006, Setúbal, Portugal, February 25-28, 2006 : revised selected papers*. Braz, J., Ranchordas, A., Araújo, H. & Jorge, J. (eds.). Berlin/Heidelberg: Springer, p. 109-122 (Communications in Computer and Information Science; No. 4).

Research output: Chapter in Book/Report/Conference proceeding › Book chapter › Research › peer-review

Photon differentials

Schjøth, L., Revall Frisvad, J., Erleben, K. & Sparring, J., 2007, *GRAPHITE 2007: Proceedings of the 5th international conference on computer graphics and interactive techniques in Australia and Southeast Asia, December 1-4, 2007, Perth, Western Australia*. Association for Computing Machinery, p. 179-186

Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings › Research › peer-review

Multiscale singularity trees

Somchaipeng, K., Sparring, J., Johansen, P. & Kreiborg, S., Dec 2007, In : *Proceedings in Applied Mathematics and Mechanics*. 7, 1, 2 p.

Research output: Contribution to journal › Conference abstract in journal › Research › peer-review

Editorial: Special Issue on Partial Differential Equations Methods in Graphics and Vision

Sparring, J., 2007, In : *Electronic Letters on Computer Vision and Image Analysis*. 6, 2, p. 0-0 1 p.

Research output: Contribution to journal › Editorial › Research

Iterative funktionssystemer

Sparring, J., 2007, *Matema10k: Matematik for gymnasiet : A-niveau*. Jensen, T., Jessen, C. & Overgård Nielsen, M. (eds.). København: Frydenlund Academic, Vol. 3. p. 153-154

Research output: Chapter in Book/Report/Conference proceeding › Book chapter › Education

MICCAI 2006

Sparring, J. (ed.), 2007, London: Taylor. 62 p. (Computer aided Surgery; No. 12 (6)).

Research output: Book/Report › Anthology

MICCAI, Guest editorial

Sparring, J. & Hata, N., 2007, In : *Journal of Computer-Aided Surgery*. 12, 6, p. 309 - 310

Research output: Contribution to journal › Editorial › Research

Special Issue on Partial Differential Equations Methods in Graphics and Vision

Sparring, J. (ed.), 2007, Barcelona: Universitat Autònoma de Barcelona. 66 p. (Electronic Letters on Computer Vision and Image Analysis; No. 6(2)).

Research output: Book/Report › Anthology

2006

Editorial

Elmegaard, B., Sparring, J., Sørensen, K. & Erleben, K., 2006, In : *Simulation Modelling Practice and Theory*. Proceedings of SIMS 2004. 14, 8, p. 1057-1058

Research output: [Contribution to journal](#) › [Editorial](#) › [Research](#)

Proceedings of SIMS 2004

Elmegaard, B. (ed.), Sparring, J. (ed.), Sørensen, K. (ed.) & Erleben, K. (ed.), 2006, Elsevier. (*Simulation Modelling Practice and Theory*; No. 8, Vol. 14).

Research output: [Book/Report](#) › [Anthology](#)

Visualization of Tooth Eruption in CT-Scans

Franken, E., Sparring, J. & Kreiborg, S., 2006, *International Workshop on Craniofacial Image Analysis for Biology, Clinical Genetics, Diagnostics and Treatment: MICCAI 2006 Workshop Proceedings*. Darvann, T. A., Hermann, N. V., Larsen, P. & Kreiborg, S. (eds.). IT-Universitetet i København, p. 33-40

Research output: [Chapter in Book/Report/Conference proceeding](#) › [Article in proceedings](#) › [Research](#) › [peer-review](#)

Medical Image Computing and Computer-Assisted Intervention -MICCAI 2006 Part II: 9th international conference , Copenhagen, Denmark, October 1-6, 2006, proceedings, Part I

Larsen, R. (ed.), Nielsen, M. (ed.) & Sparring, J. (ed.), 2006, Springer. (*Lecture notes in computer science*, Vol. 4191).

Research output: [Book/Report](#) › [Anthology](#)

Preface

Larsen, R., Nielsen, M. & Sparring, J., 2006, *9th International Conference of Medical Image Computing and Computer-Assisted Intervention (MICCAI)*. p. V-VI

Research output: [Chapter in Book/Report/Conference proceeding](#) › [Preface/postscript](#) › [Research](#)

Sideways Stepping

Markussen, B., Sparring, J. & Erleben, K., 2006, *Proceedings fra den 15. Danske Konference i Mønstergenkendelse og Billedanalyse*. 06/08 ed. Museum Tusculanum, p. 80-80

Research output: [Chapter in Book/Report/Conference proceeding](#) › [Article in proceedings](#) › [Research](#)

Medical Image Computing and Computer-Assisted Intervention -MICCAI 2006 Part I: 9th international conference , Copenhagen, Denmark, October 1-6, 2006, proceedings, Part I

Nielsen, M. (ed.), Sparring, J. (ed.) & Larsen, R. (ed.), 2006, Springer. 949 p. (*Lecture notes in computer science*; No. 4190).

Research output: [Book/Report](#) › [Anthology](#)

Ballet Balance Strategies

Pedersen, C., Erleben, K. & Sparring, J., 2006, In : *Simulation* (San Diego, Calif.). 14, 8, p. 1135-1142

Research output: [Contribution to journal](#) › [Journal article](#) › [Research](#) › [peer-review](#)

Diffusion Based Photon Mapping

Schjøth, L., Olsen, O. F. & Sparring, J., 2006, *Proceeding of the First International conference on Computer Graphics -- Theory and Applications -- (GRAPP)*. p. 168-175

Research output: [Chapter in Book/Report/Conference proceeding](#) › [Article in proceedings](#) › [Research](#) › [peer-review](#)

2005

OpenTissue - An Open Source Toolkit for Physics-Based Animation

Erleben, K., Sparring, J. & Dohlmann, H., 2005, *ISC / NA-MIC / MICCAI Workshop on Open-Source Software*. p. -

Research output: [Chapter in Book/Report/Conference proceeding](#) › [Article in proceedings](#) › [Research](#) › [peer-review](#)

Physics-based Animation

Erleben, K., Sparring, J., Henriksen, K. & Dohlmann, H., 2005, Hingham, Mass.: Charles River Media. 817 p.

Research output: [Book/Report](#) › [Book](#)

The Adaptive Thin Shell Tetrahedral Mesh

Erleben, K., Dohlmann, H. & Sporring, J., 2005, In : Journal of W S C G. 13, 1, p. 17-24

Research output: Contribution to journal › Journal article › Research › peer-review

A Graphical User-Interface and an Image Processing Toolkit for Perl

Karasik, D., Berezin, A., Belman, V. & Sporring, J., 2005, In : Software -- Practice and Experience. 35, p. 467-490

Research output: Contribution to journal › Journal article › Research › peer-review

A Multi-Scale Singularity Bounding Volume Hierarchy

Somchaipeng, K., Erleben, K. & Sporring, J., 2005, *Proceedings of WSCG*. <Forlag uden navn>, p. 179-186

Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings › Research › peer-review

Multi-Scale Singularity Trees: Soft-Linked Scale-Space Hierarchies

Somchaipeng, K., Sporring, J., Kreiborg, S. & Johansen, P., 2005, *Scale Space and PDE Methods in Computer Vision*. <Forlag uden navn>, p. 97-106 (Lecture notes in computer science, Vol. 3459/2005).

Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings › Research › peer-review

Performance Evaluation of Tree Object Matching

Somchaipeng, K., Sporring, J., Kreiborg, S. & Johansen, P., 2005

Research output: Book/Report › Report

Transitions of the Multi-Scale Singularity Trees

Somchaipeng, K., Sporring, J., Kreiborg, S. & Johansen, P., 2005, *Deep Structure, Singularities, and Computer Vision*. <Forlag uden navn>, p. 223-233 (Lecture notes in computer science, Vol. 3753/2005).

Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings › Research › peer-review

Perceptually Relevant and Piecewise Linear Matching of Silhouettes

Zabulis, X., Sporring, J. & Orphanoudakis, X., 2005, In : Pattern Recognition. 38, 1, p. 75-93

Research output: Contribution to journal › Journal article › Research › peer-review

2004

Integrity Improvements in Classically Deformable Solids

Christensen, M., Fleron, A. & Sporring, J., 2004

Research output: Book/Report › Report

Proceedings of SIMS 2004

Elmegaard, B., Sporring, J. & Erleben, K., 2004, Denmark: Technical University of Copenhagen. 452 p.

Research output: Book/Report › Anthology

Asymmetry quantization and application to human mandibles

Glerup, N., Nielsen, M., Sporring, J. & Kreiborg, S., 2004, *Proceedings of SPIE*. p. 274-282 (Medical Imaging 2004: Image Processing, Vol. 5370).

Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings › Research › peer-review

Virtual Trackballs Revisited

Henriksen, K., Sporring, J. & Hornbæk, K., 2004, In : IEEE Transactions on Visualization and Computer Graphics. 10, 2, p. 206-216

Research output: Contribution to journal › Journal article › Research › peer-review

Ballet Balance Strategies

Pedersen, C., Erleben, K. & Sporring, J., 2004, *Proceedings of SIMS 2004*. Technical University of Copenhagen, p. 323-330

Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings › Research › peer-review

A Multi-Scale Singularity Bounding Volume Hierarchy

Somchaipeng, K., Erleben, K. & Sporring, J., 2004, 08 ed. Department of Computer Science, University of Copenhagen: Datalogisk Institut.

Research output: Book/Report › Report

Report on assessment of MSSTs for 3 D Mathing Application

Somchaipeng, K., Sporring, J., Kreiborg, S. & Johansen, P., 2004, 34 p.

Research output: Book/Report › Report

Some Transitions of Exstrema-Based Multi-Scale Singularity Trees

Somchaipeng, K., Sporring, J., Kreiborg, S. & Johansen, P., 2004, *Proceedings fra den 13. Danske Konference i Mønstergenkendelse og Billedanalyse*. 04/10 ed. Museum Tusculanum, p. 48-55

Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings › Research

2003

Collision Detection of Deformable Volumetric Meshes

Erleben, K. & Sporring, J., 2003, *Graphics Programming Methods, chapter 1.5*. Lander, J. (ed.). Charles River Media, p. 51-68

Research output: Chapter in Book/Report/Conference proceeding › Book chapter › Research

Reconstruction of Optical Thickness from Hoffman Modulation Contrast Images

Olsen, N. H., Sporring, J., Nielsen, M., Hnida, C. & Ziebe, S., 2003, *Image Analysis: 13th Scandinavian Conference, SCIA 2003 Halmstad, Sweden, June 29 – July 2, 2003 Proceedings*. Springer, p. 445-454 (Lecture notes in computer science, Vol. 2749/2003).

Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings › Research › peer-review

Software for Extracting 3D - MSSTs

Somchaipeng, K., Sporring, J., Kreiborg, S. & Johansen, P., 2003

Research output: Book/Report › Report

Detection and Localization of Random Signals

Sporring, J., Olsen, N. H. & Nielsen, M., 2003, *Scale Space Methods in Computer Vision: 4th International Conference, Scale Space 2003 Isle of Skye, UK, June 10–12, 2003 Proceedings*. p. 785-797 (Lecture notes in computer science, Vol. 2695/2003).

Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings › Research › peer-review

Growth and Motion in 3D Medical Images

Sporring, J. (ed.), Niessen, W. (ed.) & Weickert, J. (ed.), 2003, In : IEEE Transactions on Medical Imaging. 22, 6, p. 697-698

Research output: Contribution to journal › Editorial › Research

Growth and Motion in 3D Medical Images: IEEE Transactions on Medical Imaging

Sporring, J. (ed.), Niessen, W. J. (ed.) & Weickert, J. (ed.), 2003, IEEE Signal Processing Society.

Research output: Book/Report › Anthology

2002

Virtual Trackballs Revisited

Henriksen, K., Sporring, J. & Hornbæk, K., 2002, *Proceedings fra den 11. Danske Konference om Mønstergenkendelse og Billedanalyse*. 02/15 ed. Department of Computer Science, University of Copenhagen, p. 114-126

Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings › Research

Tracking Target and Spiral Waves

Jensen, F. G., Sporring, J., Nielsen, M. & Sørensen, P. G., 2002, In : Chaos: An Interdisciplinary Journal of Nonlinear Science. 12, 1, p. 16-26

Research output: Contribution to journal › Journal article › Research › peer-review

Guest Editorial: Statistics of Shapes and Textures

Nielsen, M., Hansen, L. K., Johansen, P. & Sparring, J., 2002, In : *Journal of Mathematical Imaging and Vision*. 17, 2, p. 87

Research output: Contribution to journal › Editorial › Research

Special Issue on Statistics of Shapes and Textures

Nielsen, M. (ed.), Hansen, L. K. (ed.), Johansen, P. (ed.) & Sparring, J. (ed.), 2002, (*Journal of Mathematical Imaging and Vision*; No. 2, Vol. 17).

Research output: Book/Report › Anthology

Reconstruction of Optical Thickness

Olsen, N. H., Sparring, J. & Nielsen, M., 2002, *Proceedings fra den 11. Danske Konference om Mønstergenkendelse og Billedanalyse*. Department of Computer Science, University of Copenhagen, p. 114-126

Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings › Research

Growth and Motion in 3D Medical Images

Sparring, J., Niessen, W. & Weickert, J., 2002, København: 3D Lab., School of Dentistry, University of Copenhagen.

Research output: Book/Report › Anthology

The Visible Ear: A Digital Image Library of the Temporal Bone

Sørensen, M. S., Dobrzeniecki, A. B., Larsen, P., Frisch, T., Sparring, J. & Darvann, T. A., 2002, In : *Journal of Oto-Rhino-Laryngology and its related Specialities*. 64(6), p. 378-381

Research output: Contribution to journal › Journal article › Research › peer-review

2000

Generalized scale-selection

Sparring, J., Colios, C. I. & Trahanias, P. E., 29 Nov 2000, *International Conference on Image Processing (ICIP 2000)*.

Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings › Research › peer-review

Representing contours as sequences of one dimensional functions

Sparring, J. & Arps, R., 2000, *Proceedings of the 4'th Asian Conference on Computer Vision (ACCV'00)*. p. 742-746

Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings › Research › peer-review

Shape similarity by piecewise linear alignment

Sparring, J., Zabulis, X., Trahanias, P. E. & Orphanoudakis, S., 2000, *Proceedings of the Fourth Asian Conference on Computer Vision (ACCV'00)*. p. 306-311

Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings › Research › peer-review

Smoothing images creates corners

Sparring, J., Olsen, O. F., Nielsen, M. & Weickert, J., 2000, In : *Image and Vision Computing*. 18, 3, p. 261-266

Research output: Contribution to journal › Journal article › Research › peer-review

Scale summarized and focused browsing of primitive visual content

Zabulis, X., Sparring, J. & Orphanoudakis, S. C., 2000, ftp://ftp.ics.forth.gr/tech-reports/2000/2000.TR271.Scale-Summarization_Primitive_Visual_Content.ps.gz. 19 p.

Research output: Book/Report › Report

Scale summarized and focused browsing of primitive visual content

Zabulis, X., Sparring, J. & Orphanoudakis, S. C., 2000, *Fourth International Conference on Visual Information Systems*. p. 269-278 (Lecture notes in computer science, Vol. 1929).

Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings › Research › peer-review

1999

Generalized scale-selection

Sporring, J., Colios, C. I. & Trahanias, P. E., 1999, ftp://ftp.ics.forth.gr/tech-reports/1999/1999.TR264.Generalized_Scale-Selection.ps.gz. 10 p.

Research output: Book/Report › Report

Information measures in scale-spaces

Sporring, J. & Weickert, J., 1999, In : IEEE Transactions on Information Theory. 45, 3, p. 1051-1058

Research output: Contribution to journal › Journal article › Research › peer-review

Linear scale-space of spectral color images

Sporring, J. & Trahanias, P. E., 1999, ftp://ftp.ics.forth.gr/tech-reports/1999/1999.TR263.Linear_Scale-Space_Spectral_Color_Images.ps.gz. 10 p.

Research output: Book/Report › Report

Segmenting by Compression Using Linear Scale-Space and Watersheds

Sporring, J. & Olsen, O. F., 1999, *Second International Conference on Scale-Space Theories in Computer Vision*. Springer, p. 513-518 (Lecture Notes in Computer Vision, Vol. 1682).

Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings › Research › peer-review

Uncommitted size-estimation of image structure

Sporring, J. & Colios, C., 1999, ftp://ftp.ics.forth.gr/tech-reports/1999/1999.TR259.Uncommitted_Size_Estimation_Image_Structure.ps.gz.

Research output: Book/Report › Report

1998

Analysing the dynamics of target and spiral waves by image processing techniques

Jensen, F. G., Sparring, J., Nielsen, M. & Sørensen, P. G., 1998, (Technical Report; No. 16, Vol. 98).

Research output: Book/Report › Report

A note on differential corner measures

Sporring, J., Nielsen, M., Weickert, J. & Olsen, O. F., 1998, (Technical Report; No. 1, Vol. 98).

Research output: Book/Report › Report

A note on differential corner measures

Sporring, J., Nielsen, M., Weickert, J. & Olsen, O. F., 1998, *Proceedings of 14th International Conference on Pattern Recognition (ICPR 14)*. p. 652-654

Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings › Research › peer-review

A piecewise polynomial blob representation

Sporring, J., 1998, (Technical Report).

Research output: Book/Report › Report

Measuring and Modelling Image Structure

Sporring, J., 1998, (Technical Report; No. 28, Vol. 98).

Research output: Book/Report › Ph.D. thesis

1997

A prior of saliency based pruning algorithms

Sporring, J., 1997, (Technical Report; No. 8, Vol. 97).

Research output: Book/Report › Report

Gaussian Scale-Space Theory

Sporring, J., Nielsen, M., Florack, L. M. & Johansen, P., 1997, Dordrecht: Kluwer Academic Publishers.
Research output: Book/Report > Anthology

On generalized entropies and scale-space

Sporring, J. & Weickert, J., 1997, *Scale-Space Theory in Computer Vision, Proc. 1st International Conference*, Springer, p. 53-64

Research output: Chapter in Book/Report/Conference proceeding > Article in proceedings > Research > peer-review

1996

Analyzing textures by entropy

Sporring, J., 1996, *Proceedings of Symposium in Image Analysis (SSAB'96)*.

Research output: Chapter in Book/Report/Conference proceeding > Article in proceedings > Research > peer-review

On Generalized Entropies and Scale-Space

Sporring, J. & Weickert, J., 1996, Københavns Universitet: Department of Computer Science, University of Copenhagen.

Research output: Book/Report > Report

The entropy of scale-space

Sporring, J., 1996, *Proceedings of 13'th International Conference on Pattern Recognition (ICPR'96)*.

Research output: Chapter in Book/Report/Conference proceeding > Article in proceedings > Research > peer-review

The uncertainty of scale-space

Sporring, J., 1996, *Proceedings of the Copenhagen Workshop on Gaussian Scale-Space Theory*.

Research output: Chapter in Book/Report/Conference proceeding > Article in proceedings > Research

1995

Direct estimation of First Order Optic Flow

Sporring, J., 1995, *Theory & Applications of Image Processing II. Selected Articles from the 9th Scandinavian Conference on Image Analysis*. World Scientific

Research output: Chapter in Book/Report/Conference proceeding > Book chapter > Research > peer-review

Direct estimation of Time To Contact

Sporring, J. & Nielsen, M., 1995, *Proceedings of the 9th Scandinavian Conference on Image Analysis*.

Research output: Chapter in Book/Report/Conference proceeding > Article in proceedings > Research > peer-review

Direct estimation of Time To Contact

Sporring, J. & Nielsen, M., 1995, *Proceedings fra Den Fjerde Danske Konference om Mønstergenkendelse og Billedanalyse*. DIKU, p. 192-202

Research output: Chapter in Book/Report/Conference proceeding > Article in proceedings > Research

Pruning with Minimum Description Length

Sporring, J., 1995, *Proceedings of the 5. Scandinavian Conference on Artificial Intelligence (SCAI'95)*.

Research output: Chapter in Book/Report/Conference proceeding > Article in proceedings > Research > peer-review

1994

Determination of higher order optic flow: A group theoretical approach

Nielsen, M. & Sporrying, J., 1994, København: DIKU. (Department of Computer Science. University of Copenhagen. Technical Report; No. 34, Vol. 94).

Research output: Book/Report > Report

Area-based estimation of zero- and first order motion

Sporring, J. & Jørgensen, L. V., 1994, *Proceedings fra Den Tredje Danske Konference om Mønstergenkendelse og Billedanalyse*. DIKU, p. 94-100

Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings › Research

Automatic recognition of musical instruments

Sporring, J., Møller, A. & Hjørnesen, P., 1994, *Proceedings for Nordic Acoustical Meeting (NAM'94)*. DTI, p. 237-242

Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings › Research › peer-review

1993

Automatisk Instrumentgenkendelse

Sporring, J., Møller, A. & Hjørnesen, P., 1993, *Proceedings fra Den Anden Danske Konference om Mønstergenkendelse og Billedanalyse*. Museum Tusculanum, p. 146-151

Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings › Research

The above report is produced using the following setup

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