

## Publication - D. Suter - (compiled September 15, 2021)

### Book

- [1] Tat-Jun Chin and David Suter. *The Maximum Consensus Problem:Recent Algorithmic Advances*. Synthesis Lectures on Computer Vision (Eds. Gerard Medioni and Sven Dickinson). Morgan & Claypool, 2017, pp. 194–. 194 pp. ISBN: 9781627052863. DOI: [10.2200/S00757ED1V01Y201702COV011](https://doi.org/10.2200/S00757ED1V01Y201702COV011).
- [2] Alireza Bab-Hadiashar and David Suter. *Data Segmentation and Model Selection for Computer Vision*. Ed. by A. Bab-Hadiashar and D. Suter. Springer-Verlag, 2000. 236 pp. ISBN: 0-387-98815-7. URL: [http://www.ebook.de/de/product/4253445/alireza\\_bab\\_hadiashar\\_david\\_suter\\_data\\_segmentation\\_and\\_model\\_selection\\_for\\_computer\\_vision.html](http://www.ebook.de/de/product/4253445/alireza_bab_hadiashar_david_suter_data_segmentation_and_model_selection_for_computer_vision.html).

### Journal

- [1] Huu Le, Tat-Jun Chin, Anders Eriksson, Thanh-Toan Do, and David Suter. “Deterministic Approximate Methods for Maximum Consensus Robust Fitting”. In: *IEEE Transactions on Pattern Analysis and Machine Intelligence* (Mar. 2021), pp. 842–857. ISSN: 0162-8828. DOI: [10.1109/TPAMI.2019.2939307](https://doi.org/10.1109/TPAMI.2019.2939307).
- [2] D W Tan, S Z Gilani, M Boutrus, G A. Alvares, A J.O. Whitehouse, A Mian, D Suter, and M T. Maybery. “Facial asymmetry in parents of children on the autism spectrum”. In: *Autism Research* (2021).
- [3] Guobao Xiao, Hanzi Wang, Jiayi Ma, and David Suter. “Segmentation by Continuous Latent Semantic Analysis for Multi-structure Model Fitting”. In: *International Journal of Computer Vision* (2021). ISSN: 1573-1405. DOI: [10.1007/s11263-021-01468-6](https://doi.org/10.1007/s11263-021-01468-6).
- [4] Sundaram Muthu, Ruwan Tennakoon, Reza Hoseinnezhad, David Suter, and Alireza Bab-Hadiashar. “Motion segmentation of RGB-D sequences: Combining semantic and motion information using statistical inference”. In: *IEEE Trans. Image Processing* 29.1 (Dec. 2020), pp. 5557–5570. DOI: [10.1109/TIP.2020.2984893](https://doi.org/10.1109/TIP.2020.2984893).
- [5] Diana Tan, Murray Maybery, Syed Zulqarnain Gilani, Gail Alvares, Ajmal Mian, David Suter, and Andrew Whitehouse. “A broad autism phenotype expressed in facial morphology”. In: *Translational Psychiatry* 10.1 (2020). DOI: [10.1038/s41398-020-0695-z](https://doi.org/10.1038/s41398-020-0695-z).
- [6] H. Wang, G. Xiao, Y. Yan, and D. Suter. “Searching for Representative Modes on Hypergraphs for Robust Geometric Model Fitting”. In: *IEEE Transactions on Pattern Analysis and Machine Intelligence* 41.3 (Mar. 2019), pp. 697–711. ISSN: 0162-8828. DOI: [10.1109/TPAMI.2018.2803173](https://doi.org/10.1109/TPAMI.2018.2803173).
- [7] Guobao Xiao, Hanzi Wang, Yan Yan, and David Suter. “Superpixel-Guided Two-View Deterministic Geometric Model Fitting”. In: *International Journal of Computer Vision* (May 2018). ISSN: 1573-1405. DOI: [10.1007/s11263-018-1100-8](https://doi.org/10.1007/s11263-018-1100-8).

- [8] T. J. Chin, P. Purkait, A. Eriksson, and D. Suter. “Efficient Globally Optimal Consensus Maximisation with Tree Search”. In: *IEEE Transactions on Pattern Analysis and Machine Intelligence* 39.4 (Apr. 2017), pp. 758–772. ISSN: 0162-8828. DOI: [10.1109/TPAMI.2016.2631531](https://doi.org/10.1109/TPAMI.2016.2631531).
- [9] T. Lai, H. Wang, Y. Yan, G. Xiao, and D. Suter. “Efficient guided hypothesis generation for multi-structure epipolar geometry estimation”. In: *Computer Vision and Image Understanding* 154 (2017), pp. 152–165. ISSN: 10773142. DOI: [10.1016/j.cviu.2016.10.003](https://doi.org/10.1016/j.cviu.2016.10.003).
- [10] P. Purkait, T. J. Chin, A. Sadri, and D. Suter. “Clustering with Hypergraphs: The Case for Large Hyperedges”. In: *IEEE Transactions on Pattern Analysis and Machine Intelligence* PP.99 (2017), pp. 1–1. ISSN: 0162-8828. DOI: [10.1109/TPAMI.2016.2614980](https://doi.org/10.1109/TPAMI.2016.2614980).
- [11] A. Parra Bustos, T. J. Chin, A. Eriksson, H. Li, and D. Suter. “Fast Rotation Search with Stereographic Projections for 3D Registration”. In: *IEEE Transactions on Pattern Analysis and Machine Intelligence* 38.11 (Nov. 2016), pp. 2227–2240. ISSN: 0162-8828. DOI: [10.1109/TPAMI.2016.2517636](https://doi.org/10.1109/TPAMI.2016.2517636).
- [12] R. B. Tennakoon, A. Bab-Hadiashar, Z. Cao, R. Hoseinnezhad, and D. Suter. “Robust Model Fitting Using Higher Than Minimal Subset Sampling”. In: *IEEE Transactions on Pattern Analysis and Machine Intelligence* 38.2 (Feb. 2016), pp. 350–362. ISSN: 0162-8828. DOI: [10.1109/TPAMI.2015.2448103](https://doi.org/10.1109/TPAMI.2015.2448103).
- [13] Guobao Xiao, Hanzi Wang, Taotao Lai, and David Suter. “Hypergraph modelling for geometric model fitting”. In: *Pattern Recognition* 60 (2016), pp. 748–760. ISSN: 0031-3203. DOI: <https://doi.org/10.1016/j.patcog.2016.06.026>.
- [14] T. T. Pham, T. J. Chin, K. Schindler, and D. Suter. “Interacting Geometric Priors For Robust Multimodel Fitting”. In: *IEEE Transactions on Image Processing* 23.10 (Oct. 2014), pp. 4601–4610. ISSN: 1057-7149. DOI: [10.1109/TIP.2014.2346025](https://doi.org/10.1109/TIP.2014.2346025).
- [15] T. T. Pham, T. J. Chin, J. Yu, and D. Suter. “The Random Cluster Model for Robust Geometric Fitting”. In: *IEEE Transactions on Pattern Analysis and Machine Intelligence* 36.8 (Aug. 2014), pp. 1658–1671. ISSN: 0162-8828. DOI: [10.1109/TPAMI.2013.2296310](https://doi.org/10.1109/TPAMI.2013.2296310).
- [16] Q.H. Tran, T.-J. Chin, W. Chojnacki, and D. Suter. “Sampling minimal subsets with large spans for robust estimation”. In: *International Journal of Computer Vision* 106.1 (2014), pp. 93–112. ISSN: 09205691. DOI: [10.1007/s11263-013-0643-y](https://doi.org/10.1007/s11263-013-0643-y).
- [17] Y. Yan, H. Wang, and D. Suter. “Multi-subregion based correlation filter bank for robust face recognition”. In: *Pattern Recognition* 47.11 (2014), pp. 3487–3501. ISSN: 00313203. DOI: [10.1016/j.patcog.2014.05.004](https://doi.org/10.1016/j.patcog.2014.05.004).
- [18] Jin Yu, Anders Eriksson, Tat-Jun Chin, and David Suter. “An Adversarial Optimization Approach to Efficient Outlier Removal”. In: *Journal of Mathematical Imaging and Vision* 48.3 (2014), pp. 451–466. ISSN: 1573-7683. DOI: [10.1007/s10851-013-0418-7](https://doi.org/10.1007/s10851-013-0418-7).
- [19] J. Zaragoza, T. J. Chin, Q. H. Tran, M. S. Brown, and D. Suter. “As-Projective-As-Possible Image Stitching with Moving DLT”. In: *IEEE Transactions on Pattern Analysis and Machine Intelligence* 36.7 (July 2014), pp. 1285–1298. ISSN: 0162-8828. DOI: [10.1109/TPAMI.2013.247](https://doi.org/10.1109/TPAMI.2013.247).
- [20] T. Sathyan, T. J. Chin, S. Arulampalam, and D. Suter. “A Multiple Hypothesis Tracker for Multitarget Tracking With Multiple Simultaneous Measurements”. In: *IEEE Journal of Selected Topics in Signal Processing* 7.3 (June 2013), pp. 448–460. ISSN: 1932-4553. DOI: [10.1109/JSTSP.2013.2258322](https://doi.org/10.1109/JSTSP.2013.2258322).
- [21] Q.-H. Tran, T.-J. Chin, W. Chojnacki, and D. Suter. “Sampling minimal subsets with large spans for robust parameter estimation”. In: *International Journal on Computer Vision* (2013).

- [22] H.S. Wong, T.-J. Chin, J. Yu, and D. Suter. “A simultaneous sample-and-filter strategy for robust multi-structure model fitting”. In: *Computer Vision and Image Understanding* 117.12 (2013), pp. 1755–1769. ISSN: 10773142. DOI: [10.1016/j.cviu.2013.08.007](https://doi.org/10.1016/j.cviu.2013.08.007).
- [23] Hoi Sim Wong, Tat-Jun Chin, Jin Yu, and David Suter. “Mode seeking over permutations for rapid geometric model fitting”. In: *Pattern Recognition* 46.1 (2013), pp. 257–271. ISSN: 0031-3203. DOI: [10.1016/j.patcog.2012.07.005](https://doi.org/10.1016/j.patcog.2012.07.005).
- [24] Tat-Jun. Chin, Jin Yu, and David Suter. “Accelerated Hypothesis Generation for Multi-Structure Data via Preference Analysis”. In: *IEEE Trans. Pattern Analysis and Machine Intelligence* 34.4 (Apr. 2012), pp. 625–638. ISSN: 0162-8828. DOI: [10.1109/TPAMI.2011.169](https://doi.org/10.1109/TPAMI.2011.169).
- [25] Reza Hoseinnezhad, Ba-Ngu Vo, Ba-Tuong Vo, and David Suter. “Visual tracking of numerous targets via multi-Bernoulli filtering of image data”. In: *Pattern Recognition* 45.10 (2012), pp. 3625–3635. ISSN: 0031-3203. DOI: [10.1016/j.patcog.2012.04.004](https://doi.org/10.1016/j.patcog.2012.04.004).
- [26] Ba-Ngu Vo, Ba-Tuong Vo, Nam-Trung Pham, and David Suter. “Reply to: Comments on Joint Detection and Estimation of Multiple Objects from Image Observations”. In: *Signal Processing, IEEE Transactions on* 60.3 (Mar. 2012), pp. 1540–1541. ISSN: 1053-587X. DOI: [10.1109/TSP.2011.2173686](https://doi.org/10.1109/TSP.2011.2173686).
- [27] Hanzi Wang, Tat-Jun Chin, and David Suter. “Simultaneously Fitting and Segmenting Multiple-Structure Data with Outliers”. In: *IEEE Transactions on Pattern Analysis and Machine Intelligence* 34.6 (June 2012), pp. 1177–1192. ISSN: 0162-8828. DOI: [10.1109/TPAMI.2011.216](https://doi.org/10.1109/TPAMI.2011.216).
- [28] Tat-Jun Chin, Hanzi Wang, and David Suter. “Boosting Histograms of Descriptor Distances for Scalable Multiclass Specific Scene Recognition”. In: *Image and Vision Computing* 29.4 (Mar. 2011), pp. 241–250. ISSN: 0262-8856. DOI: [10.1016/j.imavis.2010.11.002](https://doi.org/10.1016/j.imavis.2010.11.002).
- [29] Weiming Hu, Haiqiang Zuo, Ou Wu, Yunfei Chen, Zhongfei Zhang, and David Suter. “Recognition of adult images, videos, and web page bags”. In: *ACM Trans. Multimedia Comput. Commun. Appl.* 7S (1 Oct. 2011), 28:1–28:24. ISSN: 1551-6857. DOI: <http://doi.acm.org/10.1145/2037676.2037685>.
- [30] R. Hoseinnezhad, A. Bab-Hadiashar, and D. Suter. “Finite Sample Bias of Robust Estimators in Segmentation of Closely Spaced Structures: A Comparative Study”. In: *Journal of Mathematical Imaging and Vision* 37.1 (2010), pp. 66–84. DOI: [10.1007/s10851-010-0193-7](https://doi.org/10.1007/s10851-010-0193-7).
- [31] Ba-Ngu Vo, Ba-Tuong Vo, Nam-Trung Pham, and D. Suter. “Joint Detection and Estimation of Multiple Objects from Image Observations”. In: *IEEE Trans. Signal Processing* 58.10 (2010), pp. 5129–5141. DOI: [10.1109/TSP.2010.2050482](https://doi.org/10.1109/TSP.2010.2050482).
- [32] P. Chen and D. Suter. “Error analysis in homography estimation by first order approximation tools: A general technique”. In: *Journal of Mathematical Imaging and Vision* 33.3 (Mar. 2009), pp. 281–295. DOI: [10.1007/s10851-008-0113-2](https://doi.org/10.1007/s10851-008-0113-2).
- [33] P. Chen and D. Suter. “Rank constraints for homographies over two views: Revisiting the rank four constraint”. In: *International Journal of Computer Vision* 81.2 (Feb. 2009), pp. 205–225. DOI: [10.1007/s11263-008-0167-z](https://doi.org/10.1007/s11263-008-0167-z).
- [34] P. Chen and D. Suter. “Simultaneously estimating the fundamental matrix and homographies”. In: *IEEE Trans. on Robotics* 25.6 (Dec. 2009), pp. 1425–1431. DOI: [10.1109/TR0.2009.2030224](https://doi.org/10.1109/TR0.2009.2030224).
- [35] EeHui Lim and D. Suter. “3D Terrestrial LIDAR Classifications with Super-voxels and Multi-scale Conditional Random Field”. In: *CAD* 41.10 (2009), pp. 701–710. DOI: [10.1016/j.cad.2009.02.010](https://doi.org/10.1016/j.cad.2009.02.010).
- [36] Hang Zhou, Liang Wang, and D. Suter. “Human Action Recognition by Feature-Reduced Gaussian Process Classification”. In: *Pattern Recognition Letters* 30.12 (Sept. 2009), pp. 1059–1066. ISSN: 0167-8655. DOI: [10.1016/j.patrec.2009.03.013](https://doi.org/10.1016/j.patrec.2009.03.013).

- [37] Tat-Jun Chin and David Suter. “Out-of-sample Extrapolation of Learned Manifolds”. In: *IEEE Trans. Pattern Analysis and Machine Intelligence* 30.9 (Sept. 2008), pp. 1547–1556. DOI: [10.1109/TPAMI.2007.70813](#).
- [38] K. Schindler and D. Suter. “Object detection by global contour shape”. In: *Pattern Recognition* 41.12 (2008), pp. 3736–3748. ISSN: 0031-3203. DOI: [10.1016/j.patcog.2008.05.025](#).
- [39] K. Schindler, D. Suter, and H. Wang. “A model-selection framework for multibody structure-and-motion of image sequences”. In: *Int. Journal of Computer Vision* 79.2 (Aug. 2008), pp. 159–177. DOI: [10.1007/s11263-007-0111-7](#).
- [40] L. Wang and D. Suter. “Visual Learning and Recognition of Sequential Data Manifolds with Applications to Human Movement Analysis”. In: *Computer Vision and Image Understanding* 110.2 (May 2008), pp. 153–172. ISSN: 1077-3142. DOI: [10.1016/j.cviu.2007.06.001](#).
- [41] P. Chen and D. Suter. “A bilinear approach to the parameter estimation of a general heteroscedastic linear system, with application to conic fitting”. In: *Journal of Mathematical Imaging and Vision* 28.3 (July 2007), pp. 191–208. DOI: [10.1007/s10851-007-0003-z](#).
- [42] Tat-Jun Chin and David Suter. “Incremental Kernel Principal Component Analysis”. In: *IEEE Trans. Image Processing* 16.6 (June 2007), pp. 1662–1674. DOI: [10.1109/TIP.2007.896668](#).
- [43] H. Wang and D. Suter. “A Consensus Based Method for Tracking: Modelling Background Scenario and Foreground Appearance”. In: *Pattern Recognition* 40.3 (2007), pp. 1091–1105. ISSN: 0031-3203. DOI: [10.1016/j.patcog.2006.05.024](#).
- [44] H. Wang, D. Suter, K. Schindler, and C. Shen. “Adaptive Object Tracking Based on an Effective Appearance Filter”. In: *IEEE Trans. Pattern Analysis and Machine Intelligence* 29.9 (Sept. 2007), pp. 1661–1667. DOI: [10.1109/TPAMI.2007.1112](#).
- [45] L. Wang and D. Suter. “Learning and Matching of Dynamic Shape Manifolds for Human Action Recognition”. In: *IEEE Trans. Image Processing* 16.6 (June 2007), pp. 1646–1661. DOI: [10.1109/TIP.2007.896661](#).
- [46] Kenji Yamamoto, Tomohiro Yendo, Toshiaki Fujii, Masayuki Tanimoto, and David Suter. “Colour Correction for Multiple-camera System by using Correspondences”. In: *The Journal of The Institute of Image Information and Television Engineers* 61.2 (2007), pp. 213–222. DOI: [10.3169/itej.61.213](#).
- [47] P. Chen and D. Suter. “An Analysis of Linear Subspace Approaches for Computer Vision and Pattern Recognition”. In: *International Journal of Computer Vision* 68.1 (2006), pp. 83–106. DOI: [10.1007/s11263-006-6659-9](#).
- [48] N. Gheissari, A. Bab-Hadiashar, and D. Suter. “Parametric Model-Based Motion Segmentation Using Surface Selection Criterion”. In: *Computer Vision and Image Understanding* 102.2 (2006), pp. 214–226. ISSN: 1077-3142. DOI: [10.1016/j.cviu.2006.02.002](#).
- [49] K. Schindler and D. Suter. “Two-view Multibody Structure-and-Motion with Outliers through Model Selection”. In: *IEEE Trans. Pattern Analysis and Machine Intelligence* 28.6 (2006), pp. 983–995. DOI: [10.1109/TPAMI.2006.130](#).
- [50] P. Chen and D. Suter. “SUBSPACE-BASED FACE RECOGNITION: OUTLIER DETECTION AND A NEW DISTANCE CRITERION”. In: *Int. Journal Pattern Recognition and Artificial Intelligence* 19.4 (2005), pp. 479–493. DOI: [10.1142/S0218001405004174](#).
- [51] P. Tissainayagam and D. Suter. “Object tracking in image sequences using point features”. In: *Pattern Recognition* 38.1 (2005), pp. 105–113. ISSN: 0031-3203. DOI: [10.1016/j.patcog.2004.05.011](#).
- [52] P. Chen and D. Suter. “Recovering the Missing Components in a Large Noisy Low-Rank Matrix: Application to SFM”. In: *IEEE Trans. Pattern Analysis and Machine Intelligence* 26.8 (Aug. 2004), pp. 1051–1063. DOI: [10.1109/TPAMI.2004.52](#).

- [53] P. Tissainayagam and D. Suter. "Assessing the Performance of Corner Detectors for Point Feature Tracking Applications". In: *Image and Vision Computing* 22.8 (Aug. 2004), pp. 663–679. DOI: [10.1016/j.imavis.2004.02.001](https://doi.org/10.1016/j.imavis.2004.02.001).
- [54] H. Wang and D. Suter. "MDPE: A Very Robust Estimator for Model Fitting and Range Image Segmentation". In: *Int. J. of Computer Vision* 59.2 (Sept. 2004), pp. 139–166. DOI: [10.1023/B:VISI.0000022287.61260.b0](https://doi.org/10.1023/B:VISI.0000022287.61260.b0).
- [55] H. Wang and D. Suter. "Robust Adaptive-Scale Parametric Model Estimation for Computer Vision". In: *IEEE Trans. Pattern Analysis and Machine Intelligence* 26.11 (Nov. 2004), pp. 1459–1479. DOI: [10.1109/TPAMI.2004.109](https://doi.org/10.1109/TPAMI.2004.109).
- [56] P. Tissainayagam and D. Suter. "Contour Tracking with Automatic Motion Model Switching". In: *Pattern Recognition* 36.10 (Oct. 2003), pp. 2411–2427. ISSN: 0031-3203. DOI: [10.1016/S0031-3203\(03\)00088-8](https://doi.org/10.1016/S0031-3203(03)00088-8).
- [57] H. Wang and D. Suter. "Using Symmetry in Robust Model Fitting". In: *Pattern Recognition Letters* 24.16 (2003), pp. 2953–2966. ISSN: 0167-8655. DOI: [10.1016/S0167-8655\(03\)00156-9](https://doi.org/10.1016/S0167-8655(03)00156-9).
- [58] P. Tissainayagam and D. Suter. "Performance measures for assessing contour trackers". In: *International Journal of Image and Graphics* 2.2 (Apr. 2002), pp. 343–359. DOI: [10.1142/S0219467802000627](https://doi.org/10.1142/S0219467802000627).
- [59] P. Tissainayagam and D. Suter. "Performance Prediction Analysis of Linear Point Feature Trackers Based on Different Motion Models". In: *Computer Vision and Image Understanding* 84.1 (Oct. 2001), pp. 104–125. ISSN: 1077-3142. DOI: [10.1006/cviu.2001.0939](https://doi.org/10.1006/cviu.2001.0939).
- [60] P. Tissainayagam and D. Suter. "Visual Tracking with Automatic Motion Model Switching". In: *Pattern Recognition* 34 (2001), pp. 641–660. ISSN: 0031-3203. DOI: [10.1016/S0031-3203\(00\)00019-4](https://doi.org/10.1016/S0031-3203(00)00019-4).
- [61] D. Suter and F. Chen. "Left Ventricular Motion Reconstruction Based on Elastic Vector Splines". In: *IEEE Trans. Medical Imaging* 19.4 (Apr. 2000), pp. 295–305. DOI: [10.1109/42.848181](https://doi.org/10.1109/42.848181).
- [62] A. Bab-Hadiashar and D. Suter. "Robust Segmentation of Visual Data Using Ranked Unbiased Scale Estimate". In: *ROBOTICA, International Journal of Information, Education and Research in Robotics and Artificial Intelligence* 17 (1999), pp. 649–660. DOI: [10.1017/S0263574799001812](https://doi.org/10.1017/S0263574799001812).
- [63] F. Chen and D. Suter. "DIV-CURL Vector Quasi-interpolation on a Finite Domain". In: *Mathematical and Computer Modelling* 30.2 (1999), pp. 179–204. ISSN: 0895-7177. DOI: [10.1016/S0895-7177\(99\)00124-7](https://doi.org/10.1016/S0895-7177(99)00124-7).
- [64] A. Bab-Hadiashar and D. Suter. "Robust Optic Flow Computation". In: *International Journal of Computer Vision* 29.1 (Aug. 1998), pp. 59–77. DOI: [10.1023/A:1008090730467](https://doi.org/10.1023/A:1008090730467).
- [65] F. Chen and D. Suter. "Fast evaluation of vector splines in three dimensions". In: *Journal of Computing* 61.3 (1998), pp. 189–213. DOI: [10.1007/BF02684350](https://doi.org/10.1007/BF02684350).
- [66] F. Chen and D. Suter. "Using a Fast Multipole Method to Accelerate the Evaluation of Splines". In: *IEEE Computational Science and Engineering* 5.3 (July 1998), pp. 24–31. DOI: [10.1109/99.714590](https://doi.org/10.1109/99.714590).
- [67] D. Suter. "Fast Evaluation of Splines Using Poisson Formula". In: *International Journal of Scientific Computing and Modeling* 1.1 (1994), pp. 70–87.
- [68] D. Suter. "Mixed-Finite Element Based Motion Estimation". In: *Innovation and Technology in Biology and Medicine* 15.3 (1994), pp. 292–307.
- [69] D. Suter. "Mixed Finite Element Based Neural Networks in Visual Reconstruction". In: *Int. Journal. of Pattern Recognition and Artificial Intelligence* 6.1 (Apr. 1992), pp. 113–129. DOI: [10.1142/S0218001492000060](https://doi.org/10.1142/S0218001492000060).
- [70] D. Suter. "Constraint Networks in Vision". In: *IEEE Transactions on Computers* 40.12 (Dec. 1991), pp. 1359–1367. DOI: [10.1109/12.106221](https://doi.org/10.1109/12.106221).
- [71] X. Deng, T. Dillon, K. Iew, J. Rankin, E. Smith, and D. Suter. "Optimal Topologies of Transputers for Different Classes of Problems". In: *Comput. Syst. Sci. Eng.* 5.1 (Jan. 1990), pp. 36–41. ISSN: 0267-6192. URL: <http://dl.acm.org/citation.cfm?id=84789.84794>.



## Conference

- [1] Tat-Jun Chin, David Suter, Shin-Fang Ch'ng, and James Quach. "Quantum Robust Fitting". In: *Computer Vision – ACCV 2020*. Ed. by Hiroshi Ishikawa, Cheng-Lin Liu, Tomas Pajdla, and Jianbo Shi. Cham: Springer International Publishing, 2021, pp. 485–499. ISBN: 978-3-030-69525-5. DOI: [10.1007/978-3-030-69525-5\\_29](https://doi.org/10.1007/978-3-030-69525-5_29).
- [2] Zaid Ilyas, Naeha Sharif, John Schousboe, Joshua Lewis, David Suter, and Syed Zulqarnain Gilani. "GuideNet: Learning Inter-Vertebral Guides in DXA Lateral Spine Images". In: *DICTA2021*. accepted Sept. 13 2021. 2021.
- [3] Ruwan Tennakoon, David Suter, Erchuan Zhang, Tat-Jun Chin, and Alireza Bab-Hadiashar. "Consensus Maximisation Using Influences of Monotone Boolean Functions". In: *CVPR2021*. Oral Presentation (17% of accepted papers, roughly 3% of submitted papers). 2021.
- [4] Giang Truong, Huu Le, David Suter, Erchuan Zhang, and Syed Zulqarnain Gilani. "Unsupervised Learning for Robust Fitting: a Reinforcement Learning Approach". In: *CVPR2021*. 2021.
- [5] Haosheng Chen, David Suter, Qiangqiang Wu, and Hanzi Wang. "End-to-end Learning of Object Motion Estimation from Retinal Events for Event-based Object Tracking". In: *The AAAI Conference on Artificial Intelligence (AAAI), New York USA*. Vol. 37. 2020, pp. 10534–10541. DOI: [10.1609/aaai.v34i07.6625](https://doi.org/10.1609/aaai.v34i07.6625). 20% acceptance rate.
- [6] N. Fayyazifar, S. Ahderom, D. Suter, A. Maiorana, and G. Dwivedi. "Impact of Neural Architecture Design on Cardiac Abnormality Classification Using 12-lead ECG Signals". In: *2020 Computing in Cardiology*. 2020, pp. 1–4. DOI: [10.22489/CinC.2020.161](https://doi.org/10.22489/CinC.2020.161).
- [7] Chau Nguyen Duc Minh, Syed Zulqarnain Gilani, Syed Islam, and David Suter. "Learning Affordance Segmentation: An Investigative Study". In: *DICTA2020*. 2020. DOI: [10.1109/DICTA51227.2020.9363390](https://doi.org/10.1109/DICTA51227.2020.9363390).
- [8] G. Truong, S. Z. Gilani, S. M. S. Islam, and D. Suter. "Fast Point Cloud Registration using Semantic Segmentation". In: *2019 Digital Image Computing: Techniques and Applications (DICTA)*. DST Best Science Paper Award. Dec. 2019, pp. 1–8. DOI: [10.1109/DICTA47822.2019.8945870](https://doi.org/10.1109/DICTA47822.2019.8945870).
- [9] Zhipeng Cai, Tat-Jun Chin, Huu Le, and David Suter. "Deterministic Consensus Maximization with Biconvex Programming". In: *Computer Vision – ECCV 2018*. Ed. by Vittorio Ferrari, Martial Hebert, Cristian Sminchisescu, and Yair Weiss. Cham: Springer International Publishing, 2018, pp. 699–714. ISBN: 978-3-030-01258-8. DOI: [10.1007/978-3-030-01258-8\\_42](https://doi.org/10.1007/978-3-030-01258-8_42).
- [10] Huu Le, Anders Eriksson, Michael Milford, Thanh-Toan Do, Tat-Jun Chin, and David Suter. "Non-smooth M-estimator for Maximum Consensus Estimation". In: *29th British Machine Vision Conference (BMVC)*. 2018. Oral Presentation - Best Science Paper Award.
- [11] Shuyuan Lin, Guobao Xiao, Yan Yan, David Suter, and Hanzi Wang. "Hypergraph Optimization for Multi-structural Geometric Model Fitting". In: *The AAAI Conference on Artificial Intelligence (AAAI), Hawaii, USA*. Vol. 33. 01. 2018, pp. 8730–8737. DOI: [10.1609/aaai.v33i01.33018730](https://doi.org/10.1609/aaai.v33i01.33018730). 16% acceptance rate.
- [12] H. M. Le, T.-J. Chin, and D. Suter. "An oexact penalty method for locally convergent maximum consensus". In: *Proceedings CVPR2017*. IEEE, 2017, pp. 379–387. DOI: [10.1109/CVPR.2017.48](https://doi.org/10.1109/CVPR.2017.48).
- [13] H. M. Le, T.-J. Chin, and D. Suter. "RATSAC - Random Tree Sampling for Maximum Consensus Estimation". In: *Proceedings DICTA2017*. DST Award. IEEE, 2017. DOI: [10.1109/DICTA.2017.8227480](https://doi.org/10.1109/DICTA.2017.8227480).
- [14] J. Williams, G. Carneiro, and D. Suter. "Region of Interest Autoencoders with an Application to Pedestrian Detection". In: *Proceedings DICTA2017*. IEEE, 2017. DOI: [10.1109/DICTA.2017.8227485](https://doi.org/10.1109/DICTA.2017.8227485).
- [15] Qianggong Zhang, T.-J. Chin, and D. Suter. "Quasiconvex Plane Sweep for Triangulation with Outliers". In: *Proceedings ICCV2017*. IEEE, 2017, pp. 920–928. DOI: [10.1109/ICCV.2017.105](https://doi.org/10.1109/ICCV.2017.105).

- [16] H. Le, T. J. Chin, and D. Suter. “Conformal Surface Alignment with Optimal Moe bius Search”. In: *2016 IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*. June 2016, pp. 2507–2516. DOI: [10.1109/CVPR.2016.275](#).
- [17] Guobao Xiao, Hanzi Wang, Yan Yan, and David Suter. “Superpixel-Based Two-View Deterministic Fitting for Multiple-Structure Data”. In: *Computer Vision – ECCV 2016*. Ed. by Bastian Leibe, Jiri Matas, Nicu Sebe, and Max Welling. Cham: Springer International Publishing, 2016, pp. 517–533. ISBN: 978-3-319-46466-4. DOI: [10.1007/978-3-319-46466-4\\_31](#).
- [18] T. J. Chin, P. Purkait, A. Eriksson, and D. Suter. “Efficient globally optimal consensus maximisation with tree search”. In: *2015 IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*. CVPR Best Paper Honourable Mention Award. June 2015, pp. 2413–2421. DOI: [10.1109/CVPR.2015.7298855](#).
- [19] M. Hadian-Jazi, A. Bab-Hadiashar, R. Hoseinnezhad, and D. Suter. “Theoretical analysis of hough transform optimal cell size: Segmentation of nearby lines”. In: *2015 International Conference on Image Processing Theory, Tools and Applications (IPTA)*. Nov. 2015, pp. 163–168. DOI: [10.1109/IPTA.2015.7367119](#).
- [20] H. Wang, G. Xiao, Y. Yan, and D. Suter. “Mode-Seeking on Hypergraphs for Robust Geometric Model Fitting”. In: *2015 IEEE International Conference on Computer Vision (ICCV)*. Dec. 2015, pp. 2902–2910. DOI: [10.1109/ICCV.2015.332](#).
- [21] A. J. P. Bustos, T. J. Chin, and D. Suter. “Fast Rotation Search with Stereographic Projections for 3D Registration”. In: *2014 IEEE Conference on Computer Vision and Pattern Recognition*. June 2014, pp. 3930–3937. DOI: [10.1109/CVPR.2014.502](#).
- [22] Tat-Jun Chin, Álvaro Parra Bustos, Michael S. Brown, and David Suter. “Fast Rotation Search for Real-time Interactive Point Cloud Registration”. In: *Proceedings of the 18th Meeting of the ACM SIGGRAPH Symposium on Interactive 3D Graphics and Games*. I3D ’14. San Francisco, California: ACM, 2014, pp. 55–62. ISBN: 978-1-4503-2717-6. DOI: [10.1145/2556700.2556712](#).
- [23] G. Lin, C. Shen, Q. Shi, A. van den Hengel, and D. Suter. “Fast Supervised Hashing with Decision Trees for High-Dimensional Data”. In: *2014 IEEE Conference on Computer Vision and Pattern Recognition*. June 2014, pp. 1971–1978. DOI: [10.1109/CVPR.2014.253](#).
- [24] Pulak Purkait, Tat-Jun Chin, Hanno Ackermann, and David Suter. “Clustering with Hypergraphs: The Case for Large Hyperedges”. In: *Computer Vision – ECCV 2014: 13th European Conference, Zurich, Switzerland, September 6-12, 2014, Proceedings, Part IV*. Ed. by David Fleet, Tomas Pajdla, Bernt Schiele, and Tinne Tuytelaars. Cham: Springer International Publishing, 2014, pp. 672–687. ISBN: 978-3-319-10593-2. DOI: [10.1007/978-3-319-10593-2\\_44](#).
- [25] G. Lin, C. Shen, D. Suter, and A. v. d. Hengel. “A General Two-Step Approach to Learning-Based Hashing”. In: *2013 IEEE International Conference on Computer Vision*. Dec. 2013, pp. 2552–2559. DOI: [10.1109/ICCV.2013.317](#).
- [26] Guosheng Lin, Chunhua Shen, Anton van den Hengel, and David Suter. “Fast Training of Effective Multi-class Boosting Using Coordinate Descent Optimization”. In: *Computer Vision – ACCV 2012: 11th Asian Conference on Computer Vision, Daejeon, Korea, November 5-9, 2012, Revised Selected Papers, Part II*. Ed. by Kyoung Mu Lee, Yasuyuki Matsushita, James M. Rehg, and Zhanyi Hu. Berlin, Heidelberg: Springer Berlin Heidelberg, 2013, pp. 782–795. ISBN: 978-3-642-37444-9. DOI: [10.1007/978-3-642-37444-9\\_61](#).
- [27] W. X. Liu, T. J. Chin, G. Carneiro, and D. Suter. “Point Correspondence Validation under Unknown Radial Distortion”. In: *2013 International Conference on Digital Image Computing: Techniques and Applications (DICTA)*. Nov. 2013, pp. 1–8. DOI: [10.1109/DICTA.2013.6691513](#).
- [28] T. Sathyan, T. J. Chin, D. Suter, and M. Hedley. “Improved wireless tracking using radio frequency and video sensors”. In: *Proceedings of the 16th International Conference on Information Fusion*. July 2013, pp. 1442–1449.

- [29] R. B. Tennakoon, A. Bab-Hadiashar, D. Suter, and Z. Cao. “Robust Data Modelling Using Thin Plate Splines”. In: *2013 International Conference on Digital Image Computing: Techniques and Applications (DICTA)*. Nov. 2013, pp. 1–8. DOI: [10.1109/DICTA.2013.6691522](https://doi.org/10.1109/DICTA.2013.6691522).
- [30] J. Zaragoza, T. J. Chin, M. S. Brown, and D. Suter. “As-Projective-As-Possible Image Stitching with Moving DLT”. In: *2013 IEEE Conference on Computer Vision and Pattern Recognition*. June 2013, pp. 2339–2346. DOI: [10.1109/CVPR.2013.303](https://doi.org/10.1109/CVPR.2013.303).
- [31] Guosheng Lin, Chunhua Shen, David Suter, and Anton van den Hengel. “Fast Training of Effective Multi-class Boosting Using Coordinate Descent Optimization”. In: *ACCV2012*. 2012.
- [32] Trung T. Pham, Tat-Jun Chin, Jin Yu, and D. Suter. “The Random Cluster Model for Robust Geometric Fitting”. In: *CVPR2012*. July 2012, pp. 710–717. DOI: [10.1109/CVPR.2012.6247740](https://doi.org/10.1109/CVPR.2012.6247740).
- [33] Quoc-Huy Tran, Tat-Jun Chin, Gustavo Carneiro, Michael S. Brown, and David Suter. “In Defence of RANSAC for Outlier Rejection in Deformable Registration”. In: *ECCV*. Vol. 4. 2012, pp. 274–287. DOI: [10.1007/978-3-642-33765-9\textunderscore20](https://doi.org/10.1007/978-3-642-33765-9\textunderscore20).
- [34] X. Zhou, X. Li, T.-J. Chin, and D. Suter. “Supapixel-driven level set tracking”. In: *Proceedings ICIP 2012*. 2012, pp. 409–412. ISBN: 9781467325332. DOI: [10.1109/ICIP.2012.6466882](https://doi.org/10.1109/ICIP.2012.6466882).
- [35] Xue Zhou, Xi Li, Tat-Jun Chin, and D. Suter. “ADAPTIVE HUMAN SILHOUETTE RECONSTRUCTION BASED ON THE EXPLORATION OF TEMPORAL INFORMATION”. In: *ICASP2012*. Mar. 2012, pp. 1005–1008. DOI: [10.1109/ICASSP.2012.6288055](https://doi.org/10.1109/ICASSP.2012.6288055).
- [36] Trung T. Pham, Tat-Jun Chin, Jin Yu, and David Suter. “Simultaneous Sampling and Multi-Structure Fitting with Adaptive Reversible Jump MCMC”. In: *Advances in Neural Information Processing Systems 24*. Editors J. Shawe-Taylor and R.S. Zemel and P. Bartlett and F.C.N. Pereira and K.Q. Weinberger. 2011, pp. 540–548. URL: [http://books.nips.cc/papers/files/nips24/NIPS2011\\_0383.pdf](http://books.nips.cc/papers/files/nips24/NIPS2011_0383.pdf).
- [37] Ba-Tuong Vo Reza Hoseinnezhad Ba-Ngu Vo and David Suter. “BAYESIAN INTEGRATION OF AUDIO AND VISUAL INFORMATION FOR MULTI-TARGET TRACKING USING A CB-MEMBER FILTER”. In: *ICASSAP 2011*. 2011, pp. 2300–2303.
- [38] Hoi Sim Wong, Tat-Jun Chin, Jin Yu, and D. Suter. “Dynamic and Hierarchical Multi-Structure Geometric Model Fitting”. In: *ICCV2011*. 2011, pp. 1044–1051. DOI: <http://doi.ieeecomputersociety.org/10.1109/ICCV.2011.6126350>.
- [39] Jin Yu, Tat-Jun Chin, and D. Suter. “A Global Optimization Approach to Robust Multi-Model Fitting”. In: *CVPR2011*. 2011, pp. 2041–2048. DOI: <http://doi.ieeecomputersociety.org/10.1109/CVPR.2011.5995608>.
- [40] Jin Yu, Anders Eriksson, Tat-Jun Chin, and D. Suter. “An Adversarial Optimization Approach to Efficient Outlier Removal”. In: *ICCV2011*. 2011, pp. 309–406. DOI: <http://doi.ieeecomputersociety.org/10.1109/ICCV.2011.6126268>.
- [41] N. A. Zaidi, D. Squire, and D. Suter. “A Gradient-Based Metric Learning Algorithm for k-NN Classifiers”. In: *AI2010: ADVANCES IN Artificial Intelligence*. Vol. 6464/2011. 2011, pp. 194–203. DOI: [10.1007/978-3-642-17432-2\\_20](https://doi.org/10.1007/978-3-642-17432-2_20).
- [42] Tat-Jun Chin, Hanzi Wang, and D. Suter. “Multi-Structure Model Selection via Kernel Optimisation”. In: *CVPR2010*. 2010, pp. 3586–3593. DOI: [10.1109/CVPR.2010.5539931](https://doi.org/10.1109/CVPR.2010.5539931).
- [43] Tat-Jun Chin, Jin Yu, and D. Suter. “Accelerated Hypothesis Generation for Multi-structure Robust Fitting”. In: *Computer Vision - ECCV2010*. Ed. by Kostas Daniilidis, Petros Maragos, and Nikos Paragios. Vol. 6315. Lecture Notes in Computer Science. Springer Berlin / Heidelberg, 2010, pp. 533–546. ISBN: 978-3-642-15554-3. DOI: [10.1007/978-3-642-15555-0\textunderscore39](https://doi.org/10.1007/978-3-642-15555-0\textunderscore39).



- [44] Liang Li, Hanzi Wang, Tat-Jun Chin, D. Suter, and Shusheng Zhang. “Retrieving 3D CAD models using 2D images with optimized weights”. In: *Image and Signal Processing (CISP), 2010 3rd International Congress on*. Vol. 4. Oct. 2010, pp. 1586–1589. DOI: [10.1109/CISP.2010.5646952](https://doi.org/10.1109/CISP.2010.5646952).
- [45] Hanzi Wang, Tat-Jun Chin, and D. Suter. “Visual Localization and Segmentation Based on Foreground/Background Modeling”. In: *ICASSAP 2010*. 2010, pp. 1158–1161. DOI: [10.1109/ICASSP.2010.5495372](https://doi.org/10.1109/ICASSP.2010.5495372).
- [46] Hoi Sim Wong, Tat-Jun Chin, Jin Yu, and D. Suter. “Efficient Multi-Structure Robust Fitting with Incremental Top-k Lists Comparison”. In: *ACCV2010*. Vol. 6495/2011. 2010, pp. 553–564. DOI: [10.1007/978-3-642-19282-1\\_44](https://doi.org/10.1007/978-3-642-19282-1_44).
- [47] N. A. Zaidi, D. Squire, and D. Suter. “BoostML: An Adaptive Metric Learning for Nearest Neighbour Classification”. In: *ADVANCES IN KNOWLEDGE DISCOVERY AND DATA MINING*. Vol. 6118/2010. 2010, pp. 142–149. DOI: [10.1007/978-3-642-13657-3\\_17](https://doi.org/10.1007/978-3-642-13657-3_17).
- [48] Tat-Jun Chin and D. Suter. “Keypoint Induced Distance Profiles for Visual Recognition”. In: *CVPR2009*. 2009, pp. 1239–1246. DOI: <http://doi.ieeecomputersociety.org/10.1109/CVPR.2009.5206734>.
- [49] Tat-Jun Chin, Hanzi Wang, and D. Suter. “Robust Fitting of Multiple Structures: The Statistical Learning Approach”. In: *ICCV2009*. 2009, pp. 413–420. DOI: [10.1109/ICCV.2009.5459150](https://doi.org/10.1109/ICCV.2009.5459150).
- [50] Tat-Jun Chin, Hanzi Wang, and D. Suter. “The Ordered Residual Kernel for Robust Motion Subspace Clustering”. In: *NIPS2009*. 2009. URL: [http://books.nips.cc/papers/files/nips22/NIPS2009\\_0504.pdf](http://books.nips.cc/papers/files/nips22/NIPS2009_0504.pdf).
- [51] R. Hoseinezhad, B-N Vo, and D. Suter. “Fast segmentation of multiple motions”. In: *Cognitive Systems with Interactive Sensors*. 2009.
- [52] R. Hoseinezhad, B-N Vo, and D. Suter. “Fast single-view people tracking”. In: *Cognitive Systems with Interactive Sensors*. 2009.
- [53] Ba-Ngu Vo, Ba-Tuong Vo, Nam Trung Pham, and D. Suter. “Bayesian Multi-Object Estimation from Image Observations”. In: *12th International Conference on Information Fusion*. 2009, pp. 890–898.
- [54] E-H. Lim and D. Suter. “Multi-scale Conditional Random Fields for Over-segmented Irregular 3D Point Clouds Classification”. In: *OTCBVS workshop (held in conjunction with CVPR2008)*. 2008. DOI: <http://doi.ieeecomputersociety.org/10.1109/CVPRW.2008.4563064>.
- [55] E-H. Lim and D. Suter. “Unsupervised Plane Data and Plane Patches Clustering for 3D Terrestrial Urban Modelling Based on Modified Dirichlet Process Mixture Model Method”. In: *VIIP2008*. 2008.
- [56] R. Jarvis S. Effendi and D. Suter. “Fast Stereo with background Removal Using Phase Correlation”. In: *IVCNZ2008*. 2008. DOI: <http://doi.ieeecomputersociety.org/10.1109/IVCNZ.2008.4762137>.
- [57] A. Shaji, S. Chandran, and D. Suter. “Manifold Optimisation for Motion Factorisation”. In: *ICPR2008*. 2008. DOI: <http://doi.ieeecomputersociety.org/10.1109/ICPR.2008.4761367>.
- [58] N. A. Zaidi and D. Suter. “Confidence Rated Boosting Algorithm for Generic Object Detection”. In: *ICPR2008*. 2008. DOI: <http://doi.ieeecomputersociety.org/10.1109/ICPR.2008.4761184>.
- [59] N. A. Zaidi and D. Suter. “Object Detection using a Cascade of Classifiers”. In: *DICTA2008*. 2008, pp. 600–605. DOI: <http://doi.ieeecomputersociety.org/10.1109/DICTA.2008.55>.
- [60] H. Zhou and D. Suter. “Improved Building Detection by Gaussian Processes Classification via Feature Space Rescale and Spectral Kernel Selection”. In: *CVPR2008*. 2008. DOI: <http://doi.ieeecomputersociety.org/10.1109/CVPR.2008.4587463>.
- [61] H. Zhou and D. Suter. “Improving Gaussian Processes Classification by Spectral Data Reorganizing”. In: *ICPR2008*. 2008. DOI: <http://doi.ieeecomputersociety.org/10.1109/ICPR.2008.4761790>.

- [62] H. Zhou, L. Wang, and D. Suter. “Human Motion Recognition using Gaussian Processes Classification”. In: *ICPR2008*. 2008. DOI: <http://doi.ieeecomputersociety.org/10.1109/ICPR.2008.4761140>.
- [63] J. Cheong, N. Faggian, G. Langs, D. Suter, and F. Cicuttini. “A Comparison of Model-Based Methods for Knee Cartilage Segmentation”. In: *2nd International Conference on Computer Vision Theory and Applications VISAPP2007*. 2007, pp. 290–295.
- [64] J. Cheong, N. Faggian, D. Suter, and F. Cicuttini. “Automatic Segmentation of Human Tibial Cartilage”. In: *The Fourth IASTED International Conference on Signal Processing, Pattern Recognition, and Applications SPPRA 2007*. 2007, pp. 368–373.
- [65] Tat-Jun Chin, Liang Wang, Konrad Schindler, and D. Suter. “Extrapolating Learned Manifolds for Human Activity Recognition”. In: *ICIP 2007*. Vol. 1. 2007, pp. 381–384. DOI: <http://doi.ieeecomputersociety.org/10.1109/ICIP.2007.4378971>.
- [66] EeHui Lim and D. Suter. “Conditional Random Field for 3D point clouds with Adaptive Data Reduction”. In: *NSAGEM 2007*. 2007, pp. 404–408. DOI: <http://doi.ieeecomputersociety.org/10.1109/CW.2007.30>.
- [67] A. Shaji, S. Chandran, B. Siddiquie, and D. Suter. “Human Pose Extraction from Monocular Videos using Constrained Non-Rigid Factorization”. In: *BMVC 2007*. 2007.
- [68] L. Wang and D. Suter. “Recognizing Human Activities from Silhouettes: Motion Subspace and Factorial Discriminative Graphical Model”. In: *CVPR2007*. 2007. DOI: <http://doi.ieeecomputersociety.org/10.1109/CVPR.2007.383298>.
- [69] H. Zhou and D. Suter. “Fast Sparse Gaussian Processes Learning for Man-Made Structure Classification”. In: *Online Learning for Classification Workshop 2007*. 2007. DOI: <http://doi.ieeecomputersociety.org/10.1109/CVPR.2007.383441>.
- [70] H. Zhou and D. Suter. “Man-Made Structure Segmentation using Gaussian Procesess and Wavelet Features”. In: *ICIP 2007*. Vol. 4. 2007, pp. 349–352. DOI: <http://doi.ieeecomputersociety.org/10.1109/ICIP.2007.4380026>.
- [71] Tat-Jun Chin, Konrad Schindler, and David Suter. “Incremental kernel SVD for face recognition with image sets”. In: *Proceedings 7th International Conference on Face and Gesture Recognition (FGR2006), Southhampton, UK*. 2006, pp. 461–466. DOI: <http://doi.ieeecomputersociety.org/10.1109/FGR.2006.67>.
- [72] Tat-Jun Chin and D. Suter. “Improving the Speed of Kernel PCA on Large Scale Datasets”. In: *Int. Conf. on Advanced Video and Signal-based Surveillance*. 2006. DOI: <http://doi.ieeecomputersociety.org/10.1109/AVSS.2006.66>.
- [73] Tat-Jun Chin and David Suter. “A New Distance Criterion for Face Recognition Using Image Sets”. In: *Computer Vision – ACCV 2006*. Ed. by P.J. Narayanan, Shree K. Nayar, and Heung-Yeung Shum. Vol. 3851. LNCS. Springer, 2006, pp. 549–558. ISBN: 3-540-31219-6. DOI: [10.1007/11612032\\_56](http://doi.ieeecomputersociety.org/10.1007/11612032_56).
- [74] Tat-Jun Chin and David Suter. “Incremental Kernel PCA for Efficient Non-linear Feature Extraction”. In: *British Machine Vision Conference BMVC2006*. 2006, pp. 939–948.
- [75] Mohamed Gobara and David Suter. “Feature Detection with an Improved Anisotropic Filter”. In: *Computer Vision – ACCV 2006*. Ed. by P.J. Narayanan, Shree K. Nayar, and Heung-Yeung Shum. Vol. 3852. LNCS. Springer, 2006, pp. 643–652. ISBN: 3-540-31244-7. DOI: [10.1007/11612704\\_64](http://doi.ieeecomputersociety.org/10.1007/11612704_64).
- [76] R. Hoseinnezhad, A. Bab-Hadiashar, and D. Suter. “Finite Sample Bias of Robust Scale Estimators in Computer Vision Problems”. In: *Lecture Notes in Computer Science, International Symposium on Visual Computing (ISVC06)*. Vol. 4291. Heidelberg: Springer-Verlag, 2006, pp. 445–454. DOI: [10.1007/11919476\\_45](http://doi.ieeecomputersociety.org/10.1007/11919476_45).
- [77] E-H. Lim and D. Suter. “Classification of 3D LIDAR Point Clouds for Urban Modelling”. In: *Image and Vision Computing, New Zealand, Nov. 2006*. 2006, pp. 149–154.

- [78] E-H. Lim and D. Suter. "Occlusion Removal in Image for 3D Urban Modelling". In: *Image and Vision Computing, New Zealand, Nov. 2006*. 2006, pp. 191–196.
- [79] T. Tangkuampien and D. Suter. "3D Object Pose Inference via Kernel Principal Component Analysis with Image Euclidian Distance (IMED)". In: *British Machine Vision Conference BMVC2006*. 2006, pp. 137–146.
- [80] T. Tangkuampien and D. Suter. "Human Motion De-noising via Greedy Kernel Principal Component Analysis Filtering". In: *Proc. ICPR 2006*. Vol. 3. 2006, pp. 457–460. DOI: <http://doi.ieeecomputersociety.org/10.1109/ICPR.2006.639>.
- [81] T. Tangkuampien and D. Suter. "Real-Time Human Pose Inference using Kernel Principal Component Pre-image Approximations". In: *British Machine Vision Conference BMVC2006*. 2006, pp. 599–608.
- [82] H. Wang and D. Suter. "Background Subtraction Based on a Robust Consensus Method". In: *Proc. ICPR 2006*. Vol. 1. 2006, pp. 223–226. DOI: <http://doi.ieeecomputersociety.org/10.1109/ICPR.2006.312>.
- [83] H. Wang and D. Suter. "Efficient Visual Tracking by Probabilistic Fusion of Multiple Cues". In: *Proc. ICPR 2006*. Vol. 4. 2006, pp. 892–895. DOI: <http://doi.ieeecomputersociety.org/10.1109/99.714590>.
- [84] H. Wang, D. Suter, and Konrad Schindler. "Effective Appearance Model and Similarity Measure for Particle Filtering and Visual Tracking". In: *European Conference on Computer Vision (ECCV), Graz, Austria, May 7-13, 2006*. Vol. 3953. LNCS. Springer, 2006, pp. 606–618. DOI: [10.1007/11744078\\_47](http://doi.ieeecomputersociety.org/10.1007/11744078_47).
- [85] Hanzhi Wang and David Suter. "A Novel Robust Statistical Method for Background Initialization and Visual Surveillance". In: *Computer Vision – ACCV 2006*. Ed. by P.J. Narayanan, Shree K. Nayar, and Heung-Yeung Shum. Vol. 3851. LNCS. Springer, 2006, pp. 328–337. ISBN: 3-540-31219-6. DOI: [10.1007/11612032\\_34](http://doi.ieeecomputersociety.org/10.1007/11612032_34).
- [86] L. Wang and D. Suter. "Analyzing Human Movements from Silhouettes using Manifold Learning". In: *Int. Conf. on Advanced Video and Signal-based Surveillance*. 2006. DOI: <http://doi.ieeecomputersociety.org/10.1109/AVSS.2006.25>.
- [87] L. Wang and D. Suter. "Informative Shape Representations for Human Action Recognition". In: *Proc. ICPR 2006*. Vol. 2. 2006, pp. 1266–1269. DOI: <http://doi.ieeecomputersociety.org/10.1109/ICPR.2006.711>.
- [88] H. Zhou and D. Suter. "A Compact Architecture for Wireless Video Surveillance over CDMA Network". In: *Int. Conf. on Advanced Video and Signal-based Surveillance*. 2006. DOI: <http://doi.ieeecomputersociety.org/10.1109/AVSS.2006.4>.
- [89] H. Zhou, D. Suter, and K. Schindler. "A Hybrid Approach to Man-Made Structure Extraction from Natural Scenes". In: *Image and Vision Computing, New Zealand, Nov. 2006*. 2006, pp. 61–66.
- [90] J. Cheong, D. Suter, and F. Cicuttini. "A Semi-automatic System for Measuring Tibial Cartilage Volume". In: *Proc. IEEE Tencon'05, Melbourne, Australia*. 2005. DOI: <http://doi.ieeecomputersociety.org/10.1109/TENCON.2005.301261>.
- [91] J. Cheong, D. Suter, and F. Cicuttini. "Development of Semi-automatic Segmentation Methods for Measuring Tibial Cartilage Volume". In: *Proc. Digital Image Computing: Techniques and Applications, Cairns, Australia*. 2005, pp. 307–314. DOI: <http://doi.ieeecomputersociety.org/10.1109/DICTA.2005.26>.
- [92] Tat-Jun Chin, James U, Konrad Schindler, and David Suter. "Face Recognition from Video by Matching Image Sets". In: *Proc. Digital Image Computing: Techniques and Applications, Cairns, Australia*. 2005, pp. 188–194. DOI: <http://doi.ieeecomputersociety.org/10.1109/DICTA.2005.36>.
- [93] K. Schindler and D. Suter. "Two-view Multibody Structure-and-Motion with Outliers". In: *Proc. IEEE Conference in Computer Vision and Pattern Recognition, CVPR2005*. Vol. 2. IEEE, 2005, pp. 676–683. DOI: <http://doi.ieeecomputersociety.org/10.1109/CVPR.2005.355>.

- [94] H. Wang and D. Suter. “A RE-EVALUATION OF MIXTURE-OF-GAUSSIAN BACKGROUND MODELING”. In: *Proc. ICASSP 2005*. 2005, pp. 1017–1020. DOI: <http://doi.ieeecomputersociety.org/10.1109/ICASSP.2005.1415580>.
- [95] H. Wang and D. Suter. “Background Initialization with A New Robust Statistical Approach”. In: *IEEE International Workshop on Visual Surveillance and Performance Evaluation of Tracking and Surveillance (VS-PETS’05)*. 2005, pp. 153–159. DOI: <http://doi.ieeecomputersociety.org/10.1109/VSPETS.2005.1570910>.
- [96] H. Wang and D. Suter. “Tracking and Segmenting People with Occlusions by a Sample Consensus Based Method”. In: *Proc. ICIP 2005*. Vol. 2. 2005, pp. 410–413. DOI: <http://doi.ieeecomputersociety.org/10.1109/ICIP.2005.1530079>.
- [97] P. Chen and D. Suter. “SHIFT-INVARIANT WAVELET DENOISING USING INTERSCALE DEPENDENCY”. In: *ICIP-2004, Singapore*. Vol. 2. 2004, pp. 1005–1008. DOI: <http://doi.ieeecomputersociety.org/10.1109/ICIP.2004.1419471>.
- [98] P. Chen and D. Suter. “Subspace-based face recognition: outlier detection and a new distance criterion”. In: *Proceedings ACCV2004*. 2004, pp. 830–835.
- [99] H. Wang and D. Suter. “Robust Fitting by Adaptive-Scale Residual Consensus”. In: *Lecture Notes in Computer Science, Proceedings ECCV2004*. Ed. by T. Pajdla and J. Matas. Vol. 3023. Heidelberg: Springer-Verlag, 2004, pp. 107–118. DOI: [10.1007/978-3-540-24672-5\\_9](http://doi.ieeecomputersociety.org/10.1007/978-3-540-24672-5_9).
- [100] D. Suter, P. Chen, and H. Wang. “Extracting Motion from Images: Robust Optic Flow and Structure From Motion”. In: *Proceedings Australia-Japan Advanced Workshop on Computer Vision, 9-11 Sept. 2003, Adelaide, Australia*. 2003, pp. 64–69.
- [101] D. Suter and H. Wang. “Robust fitting using mean shift: applications in computer vision”. In: *ICORS2003: International Conference on Robust Statistics, Antwerp, Belgium*. abstract only. 2003.
- [102] H. Wang and D. Suter. “A Model-Based Range Image Segmentation Algorithm Using a Novel Robust Estimator”. In: *3rd Int’l Workshop on Statistical and Computational Theories of Vision (in conjunction with ICCV’03), Nice, France*. Oct. 2003.
- [103] H. Wang and D. Suter. “Color Image Segmentation Using Global Information and Local Homogeneity”. In: *Proceedings 7th International Conference on Digital Image Computing: Techniques and Applications (DICTA’03), Sydney*. 2003, pp. 89–98.
- [104] H. Wang and D. Suter. “False-Peaks-Avoiding Mean Shift Method for Unsupervised Peak-Valley Sliding Image Segmentation”. In: *Proceedings 7th International Conference on Digital Image Computing: Techniques and Applications (DICTA’03), Sydney*. 2003, pp. 581–590.
- [105] H. Wang and D. Suter. “Variable Bandwidth QMDPE and its Application in Robust Optic Flow Estimation”. In: *Proceedings ICCV03, International Conference on Computer Vision, Nice, France*. 2003, pp. 178–183. DOI: <http://doi.ieeecomputersociety.org/10.1109/ICCV.2003.1238337>.
- [106] A. Bab-Hadiashar, N. Gheissari, and D. Suter. “Robust Model Based Motion Segmentation”. In: *Proceedings of ICPR2002*. Ed. by R. Kasturi, D. Laurendeau, and G. Suen. Vol. 2. 2002, pp. 753–757.
- [107] A. Bab-Hadiashar, D. Suter, and R. Hesami. “Robust Fitting for Pattern Recognition”. In: *Proceedings of 6th Digital Image Computing: Techniques and Applications (DICTA2002) conference*. 2002, pp. 358–363.
- [108] S. Boukir and D. Suter. “Application of rigid motion geometry to film restoration”. In: *Proceedings of ICPR2002*. Vol. 6. 2002, pp. 360–364.

- [109] F. Chen and D. Suter. “Motion Estimation for Noise Reduction in Historical Films: MPEG Encoding Effects”. In: *Proceedings of 6th Digital Image Computing: Techniques and Applications (DICTA2002) conference*. 2002, pp. 207–212.
- [110] D. Suter, T. Hamel, and R. Mahony. “Visual servo control using homography estimation for the stabilization of an X4-flyer”. In: *Proceedings 41st IEEE Conference on Decision and Control (CDC)*. Vol. 3. 2002, pp. 2872–2877. DOI: <http://doi.ieeecomputersociety.org/10.1109/CDC.2002.1184284>.
- [111] P. Tissainayagam and D. Suter. “Performance Measures for Assessing Contour Trackers”. In: *Proceedings of 5th Asian Conference on Computer Vision (ACCV2002)*. 2002, pp. 314–319.
- [112] H. Wang and D. Suter. “A Novel Robust Method for Large Numbers of Gross Errors”. In: *Proceedings ICARCV2002*. 2002, pp. 326–331. DOI: <http://doi.ieeecomputersociety.org/10.1109/ICARCV.2002.1234842>.
- [113] H. Wang and D. Suter. “LTSD: A Highly Efficient Symmetry-Based Robust Estimator”. In: *Proceedings ICARCV2002*. 2002, pp. 332–337. DOI: <http://doi.ieeecomputersociety.org/10.1109/ICARCV.2002.1234843>.
- [114] P. Tissainayagam and D. Suter. “Empirical Evaluation on the Performance of Contour Trackers”. In: *Proc., Third Workshop on Empirical Evaluation Methods in Computer Vision Hawaii, USA*. 2001.
- [115] A. Bab-Hadiashar and D. Suter. “Outlier Resistant GAIC Based Visual Data Segmentation”. In: *ACCV2000, Taipei, Taiwan*. 2000, pp. 1174–1179.
- [116] A. Bab-Hadiashar and D. Suter. “Simultaneous Model Recovery and Segmentation for Range Image Analysis”. In: *ACCV2000, Taipei, Taiwan*. 2000, pp. 467–471.
- [117] P. Tissainayagam and D. Suter. “Visual Tracking of Multiple Objects with Automatic Motion Model Switching”. In: *ICPR’2000, Barcelona, Spain*. 2000, pp. 1146–1149. DOI: <http://doi.ieeecomputersociety.org/10.1109/ICPR.2000.903745>.
- [118] A. Bab-Hadiashar and D. Suter. “Simultaneous Model Recovery and Segmentation Using Visual Data”. In: *DICTA’99, Perth, Australia*. 1999, pp. 241–246.
- [119] P. Tissainayagam and D. Suter. “Contour Tracking in Image Sequences”. In: *DICTA’99, Perth, Australia*. 1999, pp. 110–115.
- [120] P. Tissainayagam and D. Suter. “Performance of Visual Tracking Algorithms”. In: *DICTA’99, Perth, Australia*. 1999, pp. 206–211.
- [121] P. Tissainayagam and D. Suter. “Performance Prediction and Analysis for Linear Visual Trackers”. In: *Irish Machine Vision and Image Processing Conference IMVIP’99*. 1999, pp. 131–147. ISBN: 1 872 327 22 2.
- [122] A. Bab-Hadiashar and D. Suter. “Robust Motion Segmentation Using Rank Ordering Estimators”. In: *Lecture Notes in Computer Science: 1352, Proceedings ACCV’98, Hong Kong*. Vol. 2. 1998, pp. 599–606. DOI: [10.1007/3-540-63931-4\\_26](http://doi.ieeecomputersociety.org/10.1007/3-540-63931-4_26).
- [123] A. Bab-Hadiashar and D. Suter. “Robust Total Least Squares Based Optic Flow Computation”. In: *Lecture Notes in Computer Science: 1352, Proceedings ACCV’98, Hong Kong*. Vol. 1. 1998, pp. 566–573. DOI: [10.1007/3-540-63930-6\\_168](http://doi.ieeecomputersociety.org/10.1007/3-540-63930-6_168).
- [124] A. Bab-Hadiashar and D. Suter. “Motion Segmentation: A robust approach”. In: *Proceedings of Interpretation of Visual Motion Workshop*. 1998, pp. 3–9.
- [125] A. Bab-Hadiashar and D. Suter. “Robust Range Segmentation”. In: *14th International Conference on Pattern Recognition - ICPR’98*. Vol. 2. 1998, pp. 969–971. ISBN: 0-8186-8512-3. DOI: <http://doi.ieeecomputersociety.org/10.1109/ICPR.2006.312>.



- [126] F. Chen and D. Suter. “Image Coordinate Transformation Based on Multiple order DIV-CURL Vector Splines”. In: *14th International Conference on Pattern Recognition - ICPR'98*. Vol. 1. 1998, pp. 518–520. ISBN: 0-8186-8512-3. DOI: <http://doi.ieeecomputersociety.org/10.1109/ICPR.1998.711194>.
- [127] F. Chen and D. Suter. “Multiscale Image Representation and Edge Detection”. In: *Lecture Notes in Computer Science: 1352, Proceedings ACCV'98, Hong Kong*. Vol. 2. 1998, pp. 49–56. DOI: [10.1007/3-540-63931-4\\_19](http://doi.ieeecomputersociety.org/10.1007/3-540-63931-4_19).
- [128] P. Tissainayagam and D. Suter. “Object Tracking in Image Sequences using Multiple Hypothesis Approach”. In: *Proc., JCIS, N.C. USA , Nov. 1998*. 1998, pp. 473–475.
- [129] P. Tissainayagam and D. Suter. “Visual Feature Tracking with Automatic Motion Model Selection”. In: *Proc., JCIS, N.C. USA , Nov. 1998*. 1998, pp. 322–325.
- [130] P. Tissainayagam and D. Suter. “Visual Tracking and Motion Determination Using the IMM Algorithm”. In: *14th International Conference on Pattern Recognition - ICPR'98*. Vol. 1. 1998, pp. 289–291. ISBN: 0-8186-8512-3. DOI: <http://doi.ieeecomputersociety.org/10.1109/ICPR.1998.711138>.
- [131] P. Tissainayagam and D. Suter. “Visual Tracking with Multiple Motion Models”. In: *IAPR Machine Vision Applications (MVA'98), Chiba, Japan*. 1998, pp. 414–417.
- [132] A. Bab-Hadiashar and D. Suter. “Motion Based Segmentation Using Robust Statistics”. In: *Proc., IAIF'97, Adelaide, Nov. 1997*. Ed. by H. Pan, M. Brooks, D. McMichael, and G. Newsam. 1997, pp. 271–280. ISBN: 0-646-33069-1.
- [133] A. Bab-Hadiashar and D. Suter. “Optic Flow Calculation Using Robust Statistics”. In: *Proceedings of CVPR97, Puerto Rico*. New York: IEEE, June 1997, pp. 988–993. DOI: <http://doi.ieeecomputersociety.org/10.1109/CVPR.1997.609448>.
- [134] F. Chen and D. Suter. “Elastic Spline Models for Human Cardiac Motion Estimation”. In: *Proceedings of IEEE Non-rigid and Articulated Motion Workshop, June 16, 1997, Puerto Rico*. New York: IEEE, June 1997, pp. 120–127. DOI: <http://doi.ieeecomputersociety.org/10.1109/NAMW.1997.609862>.
- [135] F. Chen and D. Suter. “Fast evaluation of vector splines in two dimensions”. In: *Proc. 15th IMACS'97 World Conference on Scientific Computation, Modelling and Applied Mathematics, Berlin, August 1997*. Ed. by A. Sydow. Vol. 1. Wissenschaft & Technik Verlag, 1997, pp. 469–474. ISBN: 3-89685-551-4.
- [136] F. Chen and D. Suter. “Surface Reconstruction Using Multiple Order Laplacian Splines”. In: *Proc. The 33rd Australian Applied Mathematics Conference, Lorne, Victoria*. (abstract). 1997.
- [137] P. Tissainayagam and D. Suter. “Comparison of Corner Detectors for Tracking Features in Image Sequences”. In: *Proc., IAIF'97, Adelaide, Nov. 1997*. Ed. by H. Pan, M. Brooks, D. McMichael, and G. Newsam. 1997, pp. 171–181. ISBN: 0-646-33069-1.
- [138] A. Bab-Hadiashar and D. Suter. “Motion Segmentation Using Robust Motion Estimation”. In: *Proceedings Image Segmentation Workshop 1996, Sydney*. The Australian Pattern Recognition Society, 1996, pp. 7–11.
- [139] A. Bab-Hadiashar and D. Suter. “Robust Optic Flow Estimation Using Least Median of Squares”. In: *Proc. ICIP, Lausanne, Switzerland, Sept. 1996*. 1996, pp. 513–516. DOI: <http://doi.ieeecomputersociety.org/10.1109/ICIP.1996.559546>.
- [140] F. Chen and D. Suter. “Modelling and Segmentation Using Laplacian Splines and Radial Basis Functions”. In: *Proceedings Image Segmentation Workshop 1996, Sydney*. The Australian Pattern Recognition Society, 1996, pp. 115–119.
- [141] D. Suter and P. S. Richardson. “Historical Film Restoration and Video Coding”. In: *Proceedings of PCS'96, Melbourne, Aust, March 1996*. 1996, pp. 389–394.

- [142] A. Bab-Hadiashar, D. Suter, and R. Jarvis. "Optic flow computation using interpolating thin-plate splines". In: *Proceedings ACCV'95 Second Asian Conference on Computer Vision*. Vol. III. 1995, pp. 452–456.
- [143] A. Bab-Hadiashar, D. Suter, and R. Jarvis. "Two-dimensional motion extraction using image interpolation technique". In: *Applications of Digital Image processing XVIII, San Diego, July 1995*. Ed. by A. G. Tescher. SPIE, 1995, pp. 271–281.
- [144] P. S. Richardson and D. Suter. "Restoration of Historical Film for Digital Compression: A Case Study". In: *Proceedings of ICIP-95, Washington D.C., Oct. 1995*. IEEE, 1995, pp. II 49–52. DOI: <http://doi.ieeecomputersociety.org/10.1109/ICIP.1995.537412>.
- [145] D. Suter. "Divergence-free Wavelets Made Easy". In: *Wavelet Applications in Signal and Image Processing III, San Diego, July 1995*. Ed. by A. F. Laine. SPIE, 1995, pp. 102–115. DOI: [10.1117/12.217642](http://doi.ieeecomputersociety.org/10.1117/12.217642).
- [146] Y. Wu and D. Suter. "Historical Film Processing". In: *Applications of Digital Image processing XVIII, San Diego, July 1995*. Ed. by A. G. Tescher. SPIE, 1995, pp. 289–300. DOI: [10.1117/12.217412](http://doi.ieeecomputersociety.org/10.1117/12.217412).
- [147] Y. Wu and D. Suter. "Noisy Image Sequence Registration and Segmentation". In: *Proceedings of Second Asian Conference on Computer Vision, ACCV'95*. Singapore, Dec. 1995, pp. 1533–1537.
- [148] D. Suter. "Motion Estimation and Vector Splines". In: *Proc. CVPR'94, Seattle WA*. IEEE, June 1994, pp. 939–942. DOI: <http://doi.ieeecomputersociety.org/10.1109/CVPR.1994.323929>.
- [149] D. Suter. "Thin-plate Splines in Computer Vision". In: *Proceedings of Australasian Workshop on Thin-plate Splines*. Sydney, Feb. 1994.
- [150] D. Suter. "Evaluation of Splines Using Multipole-like Methods". In: *Proc. 29th Applied mathematics Conference*. Adelaide: Australian Mathematical Society, Division of Applied Mathematics, Feb. 1993, p. C66.
- [151] D. Suter. "Mixed Finite Elements and Whitney Forms in Visual Reconstruction". In: *Geometric Methods in Computer Vision II, San Diego, July 1993*. Ed. by B. C. Vemuri. SPIE, 1993, pp. 51–62. DOI: [10.1117/12.146645](http://doi.ieeecomputersociety.org/10.1117/12.146645).
- [152] D. Suter. "Multipole Methods in Visual Reconstruction". In: *Geometric Methods in Computer Vision II, San Diego, July 1993*. Ed. by B. C. Vemuri. SPIE, 1993, pp. 16–26. DOI: [10.1117/12.146628](http://doi.ieeecomputersociety.org/10.1117/12.146628).
- [153] D. Suter. "Coupled Derivative/Mixed Finite Element Approach to Visual Reconstruction". In: *Mini Conference on Inverse Problems in Partial Differential Equations*. Ed. by A. K. Pani and R. S. Anderssen. Vol. 31. Canberra, Australia: Australian National University, Centre for Mathematical Analysis, 1992, pp. 222–246.
- [154] D. Suter. "Efficient Recovery of "Time To Crash" and Rotation from Optic Flow". In: *ICARCV-92 2nd International Conference on Automation, Robotics and Computer Vision*. Vol. 1. Singapore: Institution of Engineers, Singapore, Sept. 1992, pp. CV11.4.1–CV11.4.5.
- [155] D. Suter. "Vector Spline and Radial Basis Function Methods in Visual Motion Analysis". In: *Advances in Computer Methods for Partial Differential Equations - VII*. Brunswick, New Jersey: IMACS, June 1992, pp. 714–720.
- [156] J. N. H. Garwoli and D. Suter. "Multi-Media and Image Compression with IFS and Wavelets". In: *1st Australian Multi-Media Communications Applications and Technology Workshop*. 1991, pp. 223–228.
- [157] D. Mansor and D. Suter. "Implementation of Visual Reconstruction Networks - Alternatives to Resistive Networks". In: *Proc. Int. Joint. Conf. on Neural Networks (IJCNN'91 - Singapore)*. Nov. 1991, pp. 1898–1905.
- [158] D. Suter. "Coupled Depth-Slope Model Based Upon Augmented Lagrangian Techniques". In: *Geometric Methods in Computer Vision*. Ed. by B. C. Vemuri. Vol. 1570. SPIE, 1991, pp. 129–139. DOI: [10.1117/12.48419](http://doi.ieeecomputersociety.org/10.1117/12.48419).
- [159] D. Suter. "Generalization of the Harris "Coupled Depth-Slope" Analog Visual Reconstruction Networks". In: *Proceedings of IJCNN-91-Seattle*. Seattle, July 1991, pp. I 729–739. DOI: <http://doi.ieeecomputersociety.org/10.1109/IJCNN.1991.155270>.

- [160] D. Suter. “Mixed Finite Element and Neural Network Methods of Visual Reconstruction”. In: *13th IMACS World Congress on Computation and Applied Mathematics*. Vol. 4. Dublin, July 1991, pp. 1946–1949.
- [161] D. Suter. “Mixed Finite Element Methods in Motion Analysis”. In: *DICTA-91 Digital Image Computing: Techniques and Applications*. Melbourne, Australia: Australian Pattern Recognition Society, Dec. 1991, pp. 397–404.
- [162] D. Suter. “Parallel Event Driven Simulation”. In: *9th Aust. Microelectronics Conference*. July 1990, pp. 211–213.
- [163] D. Suter and H. A. Cohen. “Incorporating knowledge via regularization theory: applications in vision and image processing”. In: *Lecture Notes in Computer Science, AI’88, 2nd Australian Joint Artificial Intelligence Conference, Adelaide, Australia, Nov. 1988 Proceedings*. Ed. by C. J. Barter and M. J. Brooks. Vol. 406. Lecture Notes in Computer Science. Berlin: Springer Verlag, 1990, pp. 379–394. DOI: [10.1001/3-540-52062-7\\_91](https://doi.org/10.1001/3-540-52062-7_91).
- [164] H. Cohen and D. Suter. “Adaptive Enhancement of Perceived Contrast in Diffuse Images: Case Study: Electron Microscope Images”. In: *ICIP89, Singapore*. Sept. 1989. Chap. 1, pp. 16–20.
- [165] D. Suter. “A new optimization method: applications in interpolation and computer vision”. In: *Proc. ACSC-12, Wollongong, Aust.* Feb. 1989, pp. 305–316.
- [166] D. Suter. “Analog Signal Processing: Applications in Computer Vision”. In: *Proc. 1989 Aust. Symp. on Signal Processing and Applications, Adelaide*. Apr. 1989, pp. 236–239.
- [167] D. Suter. “Inference In Visual Reconstruction”. In: *Proc. AI’89, Melbourne, Australia*. 1989, pp. 58–67.
- [168] D. Suter. “Transputer Based Stereo Vision System”. In: *Proc. Australian Transputer and OCCAM User Group, Melb. Aust.* June 1989, pp. 5–10.
- [169] D. Suter, X. Deng, H. Cohen, and T. Dillon. “Development and implementation of parallel vision algorithms”. In: *VIision89, Chicago*. Apr. 1989. Chap. 3, pp. 1–14.
- [170] J. You, D. Suter, X. Deng, and H. Cohen. “Parallel implementation of vision algorithms”. In: *Beijing International Symposium of Young Computer Scientists*. Aug. 1989, pp. 542–544.
- [171] D. Suter and X. Deng. “Neural Net Simulation on Transputers”. In: *Proc. IEEE Systems, Man, and Cybernetics Conf., Beijing*. Aug. 1988, pp. 694–697. DOI: <http://doi.ieeecomputersociety.org/10.1109/ICSMC.1988.754394>.
- [172] D. Suter and X. Deng. “Neural Net Simulation on Transputers”. In: *Proc. Australian Transputer and OCCAM User Group, Melb. Aust.* June 1988, pp. 43–48.
- [173] D. Suter. “Neural Net Surface Interpolation”. In: *Proc. 1987 Int’l. Conf. Systems, Man, and Cybernetics, Alexandria, VA*. Oct. 1987, pp. 118–123.
- [174] D. Suter and H. A. Cohen. “Fractals: Representations for Visual Recognition and for Graphics”. In: *Ausgraph 87, Perth Aust.* May 1987, 25 pages.
- [175] D. Suter and H. A. Cohen. “Modelling of Texture Perception”. In: *Proc. Int’l. Conf. Modelling and Simulation, Melb. Aust.* Oct. 1987, pp. 430–435.
- [176] D. Suter. “Planning in Machine Vision Tasks”. In: *Proc. 1st Australian Artificial Intelligence Congress, Melb. Aust.* Nov. 1986, 19 pages in Section E (Robotics).

## Part of Book

- [1] Therdsak Tangkuampien and David Suter. “KSM Based Machine Learning for Markerless Motion Capture”. In: ed. by Liang Wang, Li Cheng, and Guoying Zhao. Hershey, PA, USA: IGI Global, 2010, pp. 74–106. URL: <http://services.igi-global.com/resolvedoi/resolve.aspx?doi=10.4018/978-1-60566-900-7.ch005>.

- [2] D. Suter and H. Wang. “Robust Fitting Using Mean Shift: Applications in Computer Vision”. In: *Theory and Applications of Recent Robust Methods*. Ed. by Mia Hubert, Greet Pison, Anja Struyf, and Stefan Van Aelst. Basel: Birkhäuser Basel, 2004, pp. 307–318. ISBN: 978-3-0348-7958-3. DOI: [10.1007/978-3-0348-7958-3\\_27](https://doi.org/10.1007/978-3-0348-7958-3_27).
- [3] A. Bab-Hadiashar and D. Suter. “Range and Motion Segmentation”. In: *Data Segmentation and Model Selection for Computer Vision*. Ed. by A. Bab-Hadiashar and D. Suter. Springer-Verlag, 2000. Chap. 5, pp. 119–142. ISBN: 0-387-98815-7. DOI: [10.1007/978-0-387-21528-0](https://doi.org/10.1007/978-0-387-21528-0).
- [4] D. Suter. “Visual Reconstruction and Data Fusion”. In: *Progress in Neural Networks*. Ed. by O. M. Omidvar. Vol. 4: Machine Vision. Greenwich, Connecticut: Ablex, 1997. Chap. 2, pp. 29–76. ISBN: 9780893919672. URL: <https://books.google.com.au/books?id=-EhMv3dsPSAC>.
- [5] D. Suter. “Inverse Problems in Machine Vision”. In: *Computational Techniques and Applications*. Ed. by W. L. Hogarth and B. J. Noye. New York: Hemisphere, 1990, pp. 509–516.

## Theses

- [1] D. Suter. “Co-operative Algorithms for Machine Vision: Models, problem Formulation, and Neural Network Implementations”. PhD Thesis. La Trobe University, Bundoora 3083, Aust., Aug. 1990. URL: <http://trove.nla.gov.au/work/23523162>.

## Misc. (edited proceedings, special issues, invited talks)

- [1] B. Lovell and D. Suter. *Message from the general co-chairs*. IEEE Int. Conf. on Image Processing (ICIP) 2013 General Co-Chairs. 2013. DOI: [10.1109/ICIP.2013.6737997](https://doi.org/10.1109/ICIP.2013.6737997).
- [2] D. Suter. *Image Analysis - is it just applied statistical analysis and approximation theory?* (Invited Talk) Advanced Concepts for Intelligent Systems 2010, Sydney, December, 2010. 2010.
- [3] D. Suter. *Robust Statistical Fitting in Computer Vision - How do we characterise and exploit model/data "agreement"?* (Invited Talk) CVPR Summer School, Kioloa NSW, January, 2010. 2010.
- [4] D. Suter. *Finding Structure in Computer Vision Data*. (Keynote Talk) IVCNZ, Waikato Univeristy, Hamilton, New Zealand, December 2007. 2007.
- [5] D. Suter. *High dimensional data analysis in computer vision*. (Keynote Talk) IEEE 8th Int. Conf. on Computer and Information Technology, Sydney, July 2008. 2007. DOI: <http://doi.ieeecomputersociety.org/10.1109/CIT.2008.4594637>.
- [6] D. Suter. *Statistics of Linear and Non-Linear Subspace Analysis*. (Invited Talk) MIRU International Workshop on Computer Vision Hiroshima, Japan, July 29, 2007. 2007.
- [7] D. Comaniciu, R. Mester, K. Kanatani, and D. Suter (Eds.) *Statistical Methods in Video Processing, Lecture Notes in Computer Science, vol 3247, Springer, Berlin*. 2005. DOI: [10.1007/b104157](https://doi.org/10.1007/b104157).
- [8] D. Suter and D. Comaniciu K. Katani (Guest Editors). *Image and Vision Computing*. vol. 22, no. 2, February 2004. DOI: [10.1016/S0262-8856\(03\)00162-8](https://doi.org/10.1016/S0262-8856(03)00162-8).
- [9] D. Suter (Ed.) *Proceedings of Statistical Methods in Video Processing workshop*. 2002.
- [10] D. Suter (Guest Editor). *International Journal of Image and Graphics*. vol. 2, no. 2, April 2002. DOI: [10.1142/S021946780200055X](https://doi.org/10.1142/S021946780200055X).

- [11] D. Suter and A. Bab-Hadiashar (Eds.) *Proceedings of the Fifth Asian Conference on Computer Vision*. 2002.
- [12] D. Suter and A. Bab-Hadiashar (Eds.) *Proceedings of the Sixth Digital Image Computing: Techniques and Applications conference*. 2002.
- [13] D. Suter. *Motion Estimation: Historical Film Restoration and Coding*. The Second Workshop on Perceptive Systems 25-26 Jan., Curtin Uni. of Technology, Aust. Jan. 1996.
- [14] D. Suter. *Inference in Low Level Vision*. (abstract) 1989 Robertson Symposium, 19-24 Sept., ANU, Canberra, Aust., Research School of Biological Sciences and Centre for Visual Sciences, ANU. Sept. 1989.