List of selected peer-reviewed publications (in construction, incomplete list)

Frank Nielsen
https://FrankNielsen.github.io/

2022

References

[1] Frank Nielsen. "Onicescu's informational energy and correlation coefficient in exponential families". In: *Foundations* 2.2 (2022). DOI: 10.3390/foundations2020025.

[2] Frank Nielsen. "The Kullback–Leibler Divergence Between Lattice Gaussian Distributions". In: *Journal of the Indian Institute of Science* (2022), pp. 1–12.

[3] Frédéric Barbaresco and Frank Nielsen, eds. *Geometric Structures of Statistical Physics, Information Geometry, and Learning - SPIGL'20, Les Houches, France, July 27-31*. Vol. 361. Springer, 2021. ISBN: 978-3-030-77956-6. DOI: 10.1007/978-3-030-77957-3. URL: https://doi.org/10.1007/978-3-030-77957-3.

[4] Yann Cabanes and Frank Nielsen. "Classification in the Siegel Space for Vectorial Autoregressive Data". In: *Geometric Science of Information - 5th International Conference, GSI 2021, Paris, France, July 21-23, 2021, Proceedings*. Ed. by Frank Nielsen and Frédéric Barbaresco. Vol. 12829. Lecture Notes in Computer Science. Springer, 2021, pp. 693–700. DOI: 10.1007/978-3-030-80209-7_74. URL: https://doi.org/10.1007/978-3-030-80209-7%5C_74.

[5] Wu Lin et al. "Tractable structured natural-gradient descent using local parameterizations". In: *Proceedings of the 38th International Conference on Machine Learning, ICML 2021, 18-24 July 2021, Virtual Event*. Ed. by Marina Meila and Tong Zhang. Vol. 139. Proceedings of Machine Learning Research. PMLR, 2021, pp. 6680–6691. URL: http://proceedings.mlr.press/v139/lin21e.html.

[6] Gautier Marti, Victor Goubet, and Frank Nielsen. "cCorrGAN: Conditional Correlation GAN for Learning Empirical Conditional Distributions in the Elliptope". In: *Geometric Science of Information - 5th International Conference, GSI 2021, Paris, France, July 21-23, 2021, Proceedings*. Ed. by Frank Nielsen and Frédéric Barbaresco. Vol. 12829. Lecture Notes in Computer Science. Springer, 2021, pp. 613–620. DOI: 10.1007/978-3-030-80209-7_66. URL: https://doi.org/10.1007/978-3-030-80209-7%5C_66.

[7] Vaden Masrani et al. "q-Paths: Generalizing the geometric annealing path using power means". In: *Proceedings of the Thirty-Seventh Conference on Uncertainty in Artificial Intelligence, UAI 2021, Virtual Event, 27-30 July 2021*. Ed. by Cassio P. de Campos, Marloes H. Maathuis, and Erik Quaeghebeur. Vol. 161. Proceedings of Machine Learning Research. AUAI Press, 2021, pp. 1938–1947. URL: https://proceedings.mlr.press/v161/masrani21a.html.

[8] Frank Nielsen. "Fast Approximations of the Jeffreys Divergence between Univariate Gaussian Mixtures via Mixture Conversions to Exponential-Polynomial Distributions". In: *Entropy* 23.11 (2021), p. 1417. DOI: 10.3390/e23111417. URL: https://doi.org/10.3390/e23111417.

[9]   Frank Nielsen. "On a Variational Definition for the Jensen-Shannon Symmetrization of Distances Based on the Information Radius". In: *Entropy* 23.4 (2021), p. 464. DOI: `10.3390/e23040464`. URL: `https://doi.org/10.3390/e23040464`.

[10] Frank Nielsen and Frédéric Barbaresco, eds. *Geometric Science of Information - 5th International Conference, GSI 2021, Paris, France, July 21-23, 2021, Proceedings.* Vol. 12829. Lecture Notes in Computer Science. Springer, 2021. ISBN: 978-3-030-80208-0. DOI: `10.1007/978-3-030-80209-7`. URL: `https://doi.org/10.1007/978-3-030-80209-7`.

[11] Frank Nielsen and Richard Nock. "Computing Statistical Divergences with Sigma Points". In: *Geometric Science of Information - 5th International Conference, GSI 2021, Paris, France, July 21-23, 2021, Proceedings.* Ed. by Frank Nielsen and Frédéric Barbaresco. Vol. 12829. Lecture Notes in Computer Science. Springer, 2021, pp. 677–684. DOI: `10.1007/978-3-030-80209-7\_72`. URL: `https://doi.org/10.1007/978-3-030-80209-7%5C_72`.

[12] Frank Nielsen and Kazuki Okamura. "On f-divergences Between Cauchy Distributions". In: *Geometric Science of Information - 5th International Conference, GSI 2021, Paris, France, July 21-23, 2021, Proceedings.* Ed. by Frank Nielsen and Frédéric Barbaresco. Vol. 12829. Lecture Notes in Computer Science. Springer, 2021, pp. 799–807. DOI: `10.1007/978-3-030-80209-7\_86`. URL: `https://doi.org/10.1007/978-3-030-80209-7%5C_86`.

[13] Frank Nielsen and Ke Sun. "q-Neurons: Neuron Activations Based on Stochastic Jackson's Derivative Operators". In: *IEEE Trans. Neural Networks Learn. Syst.* 32.6 (2021), pp. 2782–2789. DOI: `10.1109/TNNLS.2020.3005167`. URL: `https://doi.org/10.1109/TNNLS.2020.3005167`.

[14] Nicolas Dupin, Frank Nielsen, and El-Ghazali Talbi. "Clustering a 2d Pareto Front: P-center Problems Are Solvable in Polynomial Time". In: *Optimization and Learning - Third International Conference, OLA 2020, Cádiz, Spain, February 17-19, 2020, Proceedings.* Ed. by Bernabé Dorronsoro et al. Vol. 1173. Communications in Computer and Information Science. Springer, 2020, pp. 179–191. DOI: `10.1007/978-3-030-41913-4\_15`. URL: `https://doi.org/10.1007/978-3-030-41913-4%5C_15`.

[15] Gaëtan Hadjeres and Frank Nielsen. "Anticipation-RNN: enforcing unary constraints in sequence generation, with application to interactive music generation". In: *Neural Comput. Appl.* 32.4 (2020), pp. 995–1005. DOI: `10.1007/s00521-018-3868-4`. URL: `https://doi.org/10.1007/s00521-018-3868-4`.

[16] Frank Nielsen. "An Elementary Introduction to Information Geometry". In: *Entropy* 22.10 (2020), p. 1100. DOI: `10.3390/e22101100`. URL: `https://doi.org/10.3390/e22101100`.

[17] Frank Nielsen. "On a Generalization of the Jensen-Shannon Divergence and the Jensen-Shannon Centroid". In: *Entropy* 22.2 (2020), p. 221. DOI: `10.3390/e22020221`. URL: `https://doi.org/10.3390/e22020221`.

[18] Frank Nielsen. "On Voronoi Diagrams on the Information-Geometric Cauchy Manifolds". In: *Entropy* 22.7 (2020), p. 713. DOI: `10.3390/e22070713`. URL: `https://doi.org/10.3390/e22070713`.

[19] Frank Nielsen. "The Siegel-Klein Disk: Hilbert Geometry of the Siegel Disk Domain". In: *Entropy* 22.9 (2020), p. 1019. DOI: `10.3390/e22091019`. URL: `https://doi.org/10.3390/e22091019`.

[20] Frank Nielsen and Gaëtan Hadjeres. "Quasiconvex Jensen Divergences and Quasiconvex Bregman Divergences". In: *Geometric Structures of Statistical Physics, Information Geometry, and Learning - SPIGL'20, Les Houches, France, July 27-31.* Ed. by Frédéric Barbaresco and Frank Nielsen. Vol. 361. Springer, 2020, pp. 196–218. DOI: `10.1007/978-3-030-77957-3\_11`. URL: `https://doi.org/10.1007/978-3-030-77957-3%5C_11`.

[21] Richard Nock and Frank Nielsen. "The phylogenetic tree of boosting has a bushy carriage but a single trunk". In: *Proceedings of the National Academy of Sciences* (2020).

[22] Richard Nock et al. "A Geometric Clustering Tool (AGCT) to robustly unravel the inner cluster structures of time-series gene expressions". In: *PloS one* 15.7 (2020), e0233755.

[23] Nicolas Dupin, Frank Nielsen, and El-Ghazali Talbi. "K-Medoids Clustering Is Solvable in Polynomial Time for a 2d Pareto Front". In: *Optimization of Complex Systems: Theory, Models, Algorithms and Applications, WCGO 2019, World Congress on Global Optimization, Metz, France, 8-10 July, 2019*. Ed. by Hoai An Le Thi, Hoai Minh Le, and Tao Pham Dinh. Vol. 991. Advances in Intelligent Systems and Computing. Springer, 2019, pp. 790–799. DOI: `10.1007/978-3-030-21803-4\_79`. URL: `https://doi.org/10.1007/978-3-030-21803-4%5C_79`.

[24] Erika Gomes-Gonçalves, Henryk Gzyl, and Frank Nielsen. "Geometry and Fixed-Rate Quantization in Riemannian Metric Spaces Induced by Separable Bregman Divergences". In: *Geometric Science of Information - 4th International Conference, GSI 2019, Toulouse, France, August 27-29, 2019, Proceedings*. Ed. by Frank Nielsen and Frédéric Barbaresco. Vol. 11712. Lecture Notes in Computer Science. Springer, 2019, pp. 351–358. DOI: `10.1007/978-3-030-26980-7\_36`. URL: `https://doi.org/10.1007/978-3-030-26980-7%5C_36`.

[25] Frank Nielsen. "On the Jensen-Shannon Symmetrization of Distances Relying on Abstract Means". In: *Entropy* 21.5 (2019), p. 485. DOI: `10.3390/e21050485`. URL: `https://doi.org/10.3390/e21050485`.

[26] Frank Nielsen. "The Statistical Minkowski Distances: Closed-Form Formula for Gaussian Mixture Models". In: *Geometric Science of Information - 4th International Conference, GSI 2019, Toulouse, France, August 27-29, 2019, Proceedings*. Ed. by Frank Nielsen and Frédéric Barbaresco. Vol. 11712. Lecture Notes in Computer Science. Springer, 2019, pp. 359–367. DOI: `10.1007/978-3-030-26980-7\_37`. URL: `https://doi.org/10.1007/978-3-030-26980-7%5C_37`.

[27] Frank Nielsen and Frédéric Barbaresco, eds. *Geometric Science of Information - 4th International Conference, GSI 2019, Toulouse, France, August 27-29, 2019, Proceedings*. Vol. 11712. Lecture Notes in Computer Science. Springer, 2019. ISBN: 978-3-030-26979-1. DOI: `10.1007/978-3-030-26980-7`. URL: `https://doi.org/10.1007/978-3-030-26980-7`.

[28] Frank Nielsen and Richard Nock. "The Bregman Chord Divergence". In: *Geometric Science of Information - 4th International Conference, GSI 2019, Toulouse, France, August 27-29, 2019, Proceedings*. Ed. by Frank Nielsen and Frédéric Barbaresco. Vol. 11712. Lecture Notes in Computer Science. Springer, 2019, pp. 299–308. DOI: `10.1007/978-3-030-26980-7\_31`. URL: `https://doi.org/10.1007/978-3-030-26980-7%5C_31`.

[29] Giorgio Patrini et al. "Sinkhorn AutoEncoders". In: *Proceedings of the Thirty-Fifth Conference on Uncertainty in Artificial Intelligence, UAI 2019, Tel Aviv, Israel, July 22-25, 2019*. Ed. by Amir Globerson and Ricardo Silva. Vol. 115. Proceedings of Machine Learning Research. AUAI Press, 2019, pp. 733–743. URL: `http://proceedings.mlr.press/v115/patrini20a.html`.

[30] Maria S. Greco, Rémy Boyer, and Frank Nielsen. "On the Angular Resolution Limit Uncertainty". In: *26th European Signal Processing Conference, EUSIPCO 2018, Roma, Italy, September 3-7, 2018*. IEEE, 2018, pp. 623–626. DOI: `10.23919/EUSIPCO.2018.8553603`. URL: `https://doi.org/10.23919/EUSIPCO.2018.8553603`.

[31] Frank Nielsen. "The Chord Gap Divergence and a Generalization of the Bhattacharyya Distance". In: *2018 IEEE International Conference on Acoustics, Speech and Signal Processing, ICASSP 2018, Calgary, AB, Canada, April 15-20, 2018*. IEEE, 2018, pp. 2276–2280. DOI: `10.1109/ICASSP.2018.8462244`. URL: `https://doi.org/10.1109/ICASSP.2018.8462244`.

[32] Frank Nielsen and Richard Nock. "On the Geometry of Mixtures of Prescribed Distributions". In: *2018 IEEE International Conference on Acoustics, Speech and Signal Processing, ICASSP 2018, Calgary, AB, Canada, April 15-20, 2018*. IEEE, 2018, pp. 2861–2865. DOI: `10.1109/ICASSP.2018.8461869`. URL: `https://doi.org/10.1109/ICASSP.2018.8461869`.

[33] Frank Nielsen and Ke Sun. "Guaranteed Deterministic Bounds on the total variation Distance between univariate mixtures". In: *28th IEEE International Workshop on Machine Learning for Signal Processing, MLSP 2018, Aalborg, Denmark, September 17-20, 2018*. IEEE, 2018, pp. 1–6. DOI: `10.1109/MLSP.2018.8517093`. URL: `https://doi.org/10.1109/MLSP.2018.8517093`.

[34] Gia-Thuy Pham, Rémy Boyer, and Frank Nielsen. "Computational Information Geometry for Binary Classification of High-Dimensional Random Tensors". In: *Entropy* 20.3 (2018), p. 203. DOI: 10.3390/e20030203. URL: https://doi.org/10.3390/e20030203.

[35] Rémy Boyer and Frank Nielsen. "Information geometry metric for random signal detection in large random sensing systems". In: *2017 IEEE International Conference on Acoustics, Speech and Signal Processing, ICASSP 2017, New Orleans, LA, USA, March 5-9, 2017*. IEEE, 2017, pp. 4471–4475. DOI: 10.1109/ICASSP.2017.7953002. URL: https://doi.org/10.1109/ICASSP.2017.7953002.

[36] Rémy Boyer and Frank Nielsen. "On the Error Exponent of a Random Tensor with Orthonormal Factor Matrices". In: *Geometric Science of Information - Third International Conference, GSI 2017, Paris, France, November 7-9, 2017, Proceedings*. Ed. by Frank Nielsen and Frédéric Barbaresco. Vol. 10589. Lecture Notes in Computer Science. Springer, 2017, pp. 657–664. DOI: 10.1007/978-3-319-68445-1_76. URL: https://doi.org/10.1007/978-3-319-68445-1%5C_76.

[37] Gaëtan Hadjeres, Frank Nielsen, and François Pachet. "GLSR-VAE: Geodesic latent space regularization for variational autoencoder architectures". In: *2017 IEEE Symposium Series on Computational Intelligence, SSCI 2017, Honolulu, HI, USA, November 27 - Dec. 1, 2017*. IEEE, 2017, pp. 1–7. DOI: 10.1109/SSCI.2017.8280895. URL: https://doi.org/10.1109/SSCI.2017.8280895.

[38] Gaëtan Hadjeres, François Pachet, and Frank Nielsen. "DeepBach: a Steerable Model for Bach Chorales Generation". In: *Proceedings of the 34th International Conference on Machine Learning, ICML 2017, Sydney, NSW, Australia, 6-11 August 2017*. Ed. by Doina Precup and Yee Whye Teh. Vol. 70. Proceedings of Machine Learning Research. PMLR, 2017, pp. 1362–1371. URL: http://proceedings.mlr.press/v70/hadjeres17a.html.

[39] Boris Muzellec et al. "Tsallis Regularized Optimal Transport and Ecological Inference". In: *Proceedings of the Thirty-First AAAI Conference on Artificial Intelligence, February 4-9, 2017, San Francisco, California, USA*. Ed. by Satinder P. Singh and Shaul Markovitch. AAAI Press, 2017, pp. 2387–2393. URL: http://aaai.org/ocs/index.php/AAAI/AAAI17/paper/view/14584.

[40] Frank Nielsen and Frédéric Barbaresco, eds. *Geometric Science of Information - Third International Conference, GSI 2017, Paris, France, November 7-9, 2017, Proceedings*. Vol. 10589. Lecture Notes in Computer Science. Springer, 2017. ISBN: 978-3-319-68444-4. DOI: 10.1007/978-3-319-68445-1. URL: https://doi.org/10.1007/978-3-319-68445-1.

[41] Frank Nielsen and Richard Nock. "Bregman Divergences from Comparative Convexity". In: *Geometric Science of Information - Third International Conference, GSI 2017, Paris, France, November 7-9, 2017, Proceedings*. Ed. by Frank Nielsen and Frédéric Barbaresco. Vol. 10589. Lecture Notes in Computer Science. Springer, 2017, pp. 639–647. DOI: 10.1007/978-3-319-68445-1_74. URL: https://doi.org/10.1007/978-3-319-68445-1%5C_74.

[42] Frank Nielsen and Richard Nock. "Generalizing Skew Jensen Divergences and Bregman Divergences With Comparative Convexity". In: *IEEE Signal Process. Lett.* 24.8 (2017), pp. 1123–1127. DOI: 10.1109/LSP.2017.2712195. URL: https://doi.org/10.1109/LSP.2017.2712195.

[43] Frank Nielsen and Richard Nock. "MaxEnt Upper Bounds for the Differential Entropy of Univariate Continuous Distributions". In: *IEEE Signal Process. Lett.* 24.4 (2017), pp. 402–406. DOI: 10.1109/LSP.2017.2666792. URL: https://doi.org/10.1109/LSP.2017.2666792.

[44] Frank Nielsen and Laëtitia Shao. "On Balls in a Hilbert Polygonal Geometry (Multimedia Contribution)". In: *33rd International Symposium on Computational Geometry, SoCG 2017, July 4-7, 2017, Brisbane, Australia*. Ed. by Boris Aronov and Matthew J. Katz. Vol. 77. LIPIcs. Schloss Dagstuhl - Leibniz-Zentrum für Informatik, 2017, 67:1–67:4. DOI: 10.4230/LIPIcs.SoCG.2017.67. URL: https://doi.org/10.4230/LIPIcs.SoCG.2017.67.

[45] Frank Nielsen and Ke Sun. "Combinatorial bounds on the α-divergence of univariate mixture models". In: *2017 IEEE International Conference on Acoustics, Speech and Signal Processing, ICASSP 2017, New Orleans, LA, USA, March 5-9, 2017*. IEEE, 2017, pp. 4476–4480. DOI: 10.1109/ICASSP.2017.7953003. URL: https://doi.org/10.1109/ICASSP.2017.7953003.

[46] Frank Nielsen, Ke Sun, and Stéphane Marchand-Maillet. "k-Means Clustering with Hölder Divergences". In: *Geometric Science of Information - Third International Conference, GSI 2017, Paris, France, November 7-9, 2017, Proceedings*. Ed. by Frank Nielsen and Frédéric Barbaresco. Vol. 10589. Lecture Notes in Computer Science. Springer, 2017, pp. 856–863. DOI: 10.1007/978-3-319-68445-1_98. URL: https://doi.org/10.1007/978-3-319-68445-1%5C_98.

[47] Frank Nielsen, Ke Sun, and Stéphane Marchand-Maillet. "On Hölder Projective Divergences". In: *Entropy* 19.3 (2017), p. 122. DOI: 10.3390/e19030122. URL: https://doi.org/10.3390/e19030122.

[48] Ke Sun and Frank Nielsen. "Relative Fisher Information and Natural Gradient for Learning Large Modular Models". In: *Proceedings of the 34th International Conference on Machine Learning, ICML 2017, Sydney, NSW, Australia, 6-11 August 2017*. Ed. by Doina Precup and Yee Whye Teh. Vol. 70. Proceedings of Machine Learning Research. PMLR, 2017, pp. 3289–3298. URL: http://proceedings.mlr.press/v70/sun17b.html.

[49] Stéphane Marchand-Maillet et al. "Quantifying the Invariance and Robustness of Permutation-Based Indexing Schemes". In: *Similarity Search and Applications - 9th International Conference, SISAP 2016, Tokyo, Japan, October 24-26, 2016. Proceedings*. Ed. by Laurent Amsaleg, Michael E. Houle, and Erich Schubert. Vol. 9939. Lecture Notes in Computer Science. 2016, pp. 79–92. DOI: 10.1007/978-3-319-46759-7_6. URL: https://doi.org/10.1007/978-3-319-46759-7%5C_6.

[50] Gautier Marti, Frank Nielsen, and Philippe Donnat. "Optimal copula transport for clustering multivariate time series". In: *2016 IEEE International Conference on Acoustics, Speech and Signal Processing, ICASSP 2016, Shanghai, China, March 20-25, 2016*. IEEE, 2016, pp. 2379–2383. DOI: 10.1109/ICASSP.2016.7472103. URL: https://doi.org/10.1109/ICASSP.2016.7472103.

[51] Gautier Marti et al. "Clustering Financial Time Series: How Long Is Enough?" In: *Proceedings of the Twenty-Fifth International Joint Conference on Artificial Intelligence, IJCAI 2016, New York, NY, USA, 9-15 July 2016*. Ed. by Subbarao Kambhampati. IJCAI/AAAI Press, 2016, pp. 2583–2589. URL: http://www.ijcai.org/Abstract/16/367.

[52] Gautier Marti et al. "Exploring and measuring non-linear correlations: Copulas, Lightspeed Transportation and Clustering". In: *Proceedings of the NIPS 2016 Time Series Workshop, co-located with the 30th Annual Conference on Neural Information Processing Systems (NIPS 2016), Barcelona, Spain, December 9, 2016*. Ed. by Oren Anava et al. Vol. 55. JMLR Workshop and Conference Proceedings. JMLR.org, 2016, pp. 59–69. URL: http://proceedings.mlr.press/v55/marti16.html.

[53] Gautier Marti et al. "Optimal transport vs. Fisher-Rao distance between copulas for clustering multivariate time series". In: *IEEE Statistical Signal Processing Workshop, SSP 2016, Palma de Mallorca, Spain, June 26-29, 2016*. IEEE, 2016, pp. 1–5. DOI: 10.1109/SSP.2016.7551770. URL: https://doi.org/10.1109/SSP.2016.7551770.

[54] Frank Nielsen. *Introduction to HPC with MPI for Data Science*. Undergraduate Topics in Computer Science. Springer, 2016. ISBN: 978-3-319-21902-8. DOI: 10.1007/978-3-319-21903-5. URL: https://doi.org/10.1007/978-3-319-21903-5.

[55] Frank Nielsen, Boris Muzellec, and Richard Nock. "Classification with mixtures of curved mahalanobis metrics". In: *2016 IEEE International Conference on Image Processing, ICIP 2016, Phoenix, AZ, USA, September 25-28, 2016*. IEEE, 2016, pp. 241–245. DOI: 10.1109/ICIP.2016.7532355. URL: https://doi.org/10.1109/ICIP.2016.7532355.

[56] Frank Nielsen and Richard Nock. "Patch Matching with Polynomial Exponential Families and Projective Divergences". In: *Similarity Search and Applications - 9th International Conference, SISAP 2016, Tokyo, Japan, October 24-26, 2016. Proceedings*. Ed. by Laurent Amsaleg, Michael E. Houle, and Erich Schubert. Vol. 9939. Lecture Notes in Computer Science. 2016, pp. 109–116. DOI: 10.1007/978-3-319-46759-7_8. URL: https://doi.org/10.1007/978-3-319-46759-7%5C_8.

[57] Frank Nielsen and Ke Sun. "Guaranteed Bounds on Information-Theoretic Measures of Univariate Mixtures Using Piecewise Log-Sum-Exp Inequalities". In: *Entropy* 18.12 (2016), p. 442. DOI: 10.3390/e18120442. URL: https://doi.org/10.3390/e18120442.

[58] Frank Nielsen and Ke Sun. "Guaranteed Bounds on the Kullback-Leibler Divergence of Univariate Mixtures". In: *IEEE Signal Process. Lett.* 23.11 (2016), pp. 1543–1546. DOI: `10.1109/LSP.2016.2606661`. URL: `https://doi.org/10.1109/LSP.2016.2606661`.

[59] Richard Nock, Frank Nielsen, and Shun-ichi Amari. "On Conformal Divergences and Their Population Minimizers". In: *IEEE Trans. Inf. Theory* 62.1 (2016), pp. 527–538. DOI: `10.1109/TIT.2015.2448072`. URL: `https://doi.org/10.1109/TIT.2015.2448072`.

[60] Richard Nock et al. "k-variates++: more pluses in the k-means++". In: *Proceedings of the 33nd International Conference on Machine Learning, ICML 2016, New York City, NY, USA, June 19-24, 2016.* Ed. by Maria-Florina Balcan and Kilian Q. Weinberger. Vol. 48. JMLR Workshop and Conference Proceedings. JMLR.org, 2016, pp. 145–154. URL: `http://proceedings.mlr.press/v48/nock16.html`.

[61] Giorgio Patrini et al. "Loss factorization, weakly supervised learning and label noise robustness". In: *Proceedings of the 33nd International Conference on Machine Learning, ICML 2016, New York City, NY, USA, June 19-24, 2016.* Ed. by Maria-Florina Balcan and Kilian Q. Weinberger. Vol. 48. JMLR Workshop and Conference Proceedings. JMLR.org, 2016, pp. 708–717. URL: `http://proceedings.mlr.press/v48/patrini16.html`.

[62] Olivier Schwander, Stéphane Marchand-Maillet, and Frank Nielsen. "Comix: Joint estimation and lightspeed comparison of mixture models". In: *2016 IEEE International Conference on Acoustics, Speech and Signal Processing, ICASSP 2016, Shanghai, China, March 20-25, 2016.* IEEE, 2016, pp. 2449–2453. DOI: `10.1109/ICASSP.2016.7472117`. URL: `https://doi.org/10.1109/ICASSP.2016.7472117`.

[63] Junlin Yao and Frank Nielsen. "SSSC-AM: A unified framework for video co-segmentation by structured sparse subspace clustering with appearance and motion features". In: *2016 IEEE International Conference on Image Processing, ICIP 2016, Phoenix, AZ, USA, September 25-28, 2016.* IEEE, 2016, pp. 3957–3961. DOI: `10.1109/ICIP.2016.7533102`. URL: `https://doi.org/10.1109/ICIP.2016.7533102`.

[64] Gautier Marti et al. "A Proposal of a Methodological Framework with Experimental Guidelines to Investigate Clustering Stability on Financial Time Series". In: *14th IEEE International Conference on Machine Learning and Applications, ICMLA 2015, Miami, FL, USA, December 9-11, 2015.* Ed. by Tao Li et al. IEEE, 2015, pp. 32–37. DOI: `10.1109/ICMLA.2015.11`. URL: `https://doi.org/10.1109/ICMLA.2015.11`.

[65] Gautier Marti et al. "Clustering Random Walk Time Series". In: *Geometric Science of Information - Second International Conference, GSI 2015, Palaiseau, France, October 28-30, 2015, Proceedings.* Ed. by Frank Nielsen and Frédéric Barbaresco. Vol. 9389. Lecture Notes in Computer Science. Springer, 2015, pp. 675–684. DOI: `10.1007/978-3-319-25040-3\_72`. URL: `https://doi.org/10.1007/978-3-319-25040-3%5C_72`.

[66] Frank Nielsen and Frédéric Barbaresco, eds. *Geometric Science of Information - Second International Conference, GSI 2015, Palaiseau, France, October 28-30, 2015, Proceedings.* Vol. 9389. Lecture Notes in Computer Science. Springer, 2015. ISBN: 978-3-319-25039-7. DOI: `10.1007/978-3-319-25040-3`. URL: `https://doi.org/10.1007/978-3-319-25040-3`.

[67] Frank Nielsen and Gaëtan Hadjeres. "Approximating Covering and Minimum Enclosing Balls in Hyperbolic Geometry". In: *Geometric Science of Information - Second International Conference, GSI 2015, Palaiseau, France, October 28-30, 2015, Proceedings.* Ed. by Frank Nielsen and Frédéric Barbaresco. Vol. 9389. Lecture Notes in Computer Science. Springer, 2015, pp. 586–594. DOI: `10.1007/978-3-319-25040-3\_63`. URL: `https://doi.org/10.1007/978-3-319-25040-3%5C_63`.

[68] Frank Nielsen and Richard Nock. "Total Jensen divergences: Definition, properties and clustering". In: *2015 IEEE International Conference on Acoustics, Speech and Signal Processing, ICASSP 2015, South Brisbane, Queensland, Australia, April 19-24, 2015.* IEEE, 2015, pp. 2016–2020. DOI: `10.1109/ICASSP.2015.7178324`. URL: `https://doi.org/10.1109/ICASSP.2015.7178324`.

[69] Richard Nock et al. "Gentle Nearest Neighbors Boosting over Proper Scoring Rules". In: *IEEE Trans. Pattern Anal. Mach. Intell.* 37.1 (2015), pp. 80–93. DOI: `10.1109/TPAMI.2014.2307877`. URL: `https://doi.org/10.1109/TPAMI.2014.2307877`.

[70] Christophe Saint-Jean and Frank Nielsen. "Online k-MLE for Mixture Modeling with Exponential Families". In: *Geometric Science of Information - Second International Conference, GSI 2015, Palaiseau, France, October 28-30, 2015, Proceedings.* Ed. by Frank Nielsen and Frédéric Barbaresco. Vol. 9389. Lecture Notes in Computer Science. Springer, 2015, pp. 340–348. DOI: `10.1007/978-3-319-25040-3\_37`. URL: `https://doi.org/10.1007/978-3-319-25040-3%5C_37`.

[71] Olivier Schwander and Frank Nielsen. "Bag-of-Components: An Online Algorithm for Batch Learning of Mixture Models". In: *Geometric Science of Information - Second International Conference, GSI 2015, Palaiseau, France, October 28-30, 2015, Proceedings.* Ed. by Frank Nielsen and Frédéric Barbaresco. Vol. 9389. Lecture Notes in Computer Science. Springer, 2015, pp. 387–395. DOI: `10.1007/978-3-319-25040-3\_42`. URL: `https://doi.org/10.1007/978-3-319-25040-3%5C_42`.

[72] Frank Nielsen. "Generalized Bhattacharyya and Chernoff upper bounds on Bayes error using quasi-arithmetic means". In: *Pattern Recognit. Lett.* 42 (2014), pp. 25–34. DOI: `10.1016/j.patrec.2014.01.002`. URL: `https://doi.org/10.1016/j.patrec.2014.01.002`.

[73] Frank Nielsen and Richard Nock. "On the Chi Square and Higher-Order Chi Distances for Approximating f-Divergences". In: *IEEE Signal Process. Lett.* 21.1 (2014), pp. 10–13. DOI: `10.1109/LSP.2013.2288355`. URL: `https://doi.org/10.1109/LSP.2013.2288355`.

[74] Frank Nielsen and Richard Nock. "Optimal Interval Clustering: Application to Bregman Clustering and Statistical Mixture Learning". In: *IEEE Signal Process. Lett.* 21.10 (2014), pp. 1289–1292. DOI: `10.1109/LSP.2014.2333001`. URL: `https://doi.org/10.1109/LSP.2014.2333001`.

[75] Frank Nielsen and Richard Nock. "Visualizing hyperbolic Voronoi diagrams". In: *30th Annual Symposium on Computational Geometry, SoCG'14, Kyoto, Japan, June 08 - 11, 2014.* Ed. by Siu-Wing Cheng and Olivier Devillers. ACM, 2014, p. 90. DOI: `10.1145/2582112.2595647`. URL: `https://doi.org/10.1145/2582112.2595647`.

[76] Frank Nielsen, Richard Nock, and Shun-ichi Amari. "On Clustering Histograms with k-Means by Using Mixed α-Divergences". In: *Entropy* 16.6 (2014), pp. 3273–3301. DOI: `10.3390/e16063273`. URL: `https://doi.org/10.3390/e16063273`.

[77] Frank Nielsen. "An Information-Geometric Characterization of Chernoff Information". In: *IEEE Signal Process. Lett.* 20.3 (2013), pp. 269–272. DOI: `10.1109/LSP.2013.2243726`. URL: `https://doi.org/10.1109/LSP.2013.2243726`.

[78] Frank Nielsen. "Hypothesis Testing, Information Divergence and Computational Geometry". In: *Geometric Science of Information - First International Conference, GSI 2013, Paris, France, August 28-30, 2013. Proceedings.* Ed. by Frank Nielsen and Frédéric Barbaresco. Vol. 8085. Lecture Notes in Computer Science. Springer, 2013, pp. 241–248. DOI: `10.1007/978-3-642-40020-9\_25`. URL: `https://doi.org/10.1007/978-3-642-40020-9%5C_25`.

[79] Frank Nielsen. "Jeffreys Centroids: A Closed-Form Expression for Positive Histograms and a Guaranteed Tight Approximation for Frequency Histograms". In: *IEEE Signal Process. Lett.* 20.7 (2013), pp. 657–660. DOI: `10.1109/LSP.2013.2260538`. URL: `https://doi.org/10.1109/LSP.2013.2260538`.

[80] Frank Nielsen. "Pattern Learning and Recognition on Statistical Manifolds: An Information-Geometric Review". In: *Similarity-Based Pattern Recognition - Second International Workshop, SIMBAD 2013, York, UK, July 3-5, 2013. Proceedings.* Ed. by Edwin R. Hancock and Marcello Pelillo. Vol. 7953. Lecture Notes in Computer Science. Springer, 2013, pp. 1–25. DOI: `10.1007/978-3-642-39140-8\_1`. URL: `https://doi.org/10.1007/978-3-642-39140-8%5C_1`.

[81] Frank Nielsen. "Perspective click-and-drag area selections in pictures". In: *Proceedings of the 13. IAPR International Conference on Machine Vision Applications, MVA 2013, Kyoto, Japan, May 20-23, 2013*. 2013, pp. 29–32. URL: `http://www.mva-org.jp/Proceedings/2013USB/papers/03-03.pdf`.

[82] Frank Nielsen and Frédéric Barbaresco, eds. *Geometric Science of Information - First International Conference, GSI 2013, Paris, France, August 28-30, 2013. Proceedings*. Vol. 8085. Lecture Notes in Computer Science. Springer, 2013. ISBN: 978-3-642-40019-3. DOI: `10.1007/978-3-642-40020-9`. URL: `https://doi.org/10.1007/978-3-642-40020-9`.

[83] Frank Nielsen and Richard Nock. "Consensus Region Merging for Image Segmentation". In: *2nd IAPR Asian Conference on Pattern Recognition, ACPR 2013, Naha, Japan, November 5-8, 2013*. IEEE, 2013, pp. 325–329. DOI: `10.1109/ACPR.2013.142`. URL: `https://doi.org/10.1109/ACPR.2013.142`.

[84] Richard Nock and Frank Nielsen. "Information-geometric lenses for multiple foci+contexts interfaces". In: *SIGGRAPH Asia 2013, Hong Kong, China, November 19-22, 2013, Technical Briefs*. Ed. by Baoquan Chen and Andrei Sharf. ACM, 2013, 18:1–18:4. DOI: `10.1145/2542355.2542378`. URL: `https://doi.org/10.1145/2542355.2542378`.

[85] Richard Nock, Frank Nielsen, and Eric Briys. "Non-linear book manifolds: learning from associations the dynamic geometry of digital libraries". In: *13th ACM/IEEE-CS Joint Conference on Digital Libraries, JCDL '13, Indianapolis, IN, USA, July 22 - 26, 2013*. Ed. by J. Stephen Downie et al. ACM, 2013, pp. 313–322. DOI: `10.1145/2467696.2467697`. URL: `https://doi.org/10.1145/2467696.2467697`.

[86] Christophe Saint-Jean and Frank Nielsen. "A New Implementation of k-MLE for Mixture Modeling of Wishart Distributions". In: *Geometric Science of Information - First International Conference, GSI 2013, Paris, France, August 28-30, 2013. Proceedings*. Ed. by Frank Nielsen and Frédéric Barbaresco. Vol. 8085. Lecture Notes in Computer Science. Springer, 2013, pp. 249–256. DOI: `10.1007/978-3-642-40020-9\_26`. URL: `https://doi.org/10.1007/978-3-642-40020-9%5C_26`.

[87] Olivier Schwander and Frank Nielsen. "Fast Learning of Gamma Mixture Models with k-MLE". In: *Similarity-Based Pattern Recognition - Second International Workshop, SIMBAD 2013, York, UK, July 3-5, 2013. Proceedings*. Ed. by Edwin R. Hancock and Marcello Pelillo. Vol. 7953. Lecture Notes in Computer Science. Springer, 2013, pp. 235–249. DOI: `10.1007/978-3-642-39140-8\_16`. URL: `https://doi.org/10.1007/978-3-642-39140-8%5C_16`.

[88] Roberto D'Ambrosio et al. "Biomedical Images Classification by Universal Nearest Neighbours Classifier Using Posterior Probability". In: *Machine Learning in Medical Imaging - Third International Workshop, MLMI 2012, Held in Conjunction with MICCAI 2012, Nice, France, October 1, 2012, Revised Selected Papers*. Ed. by Fei Wang et al. Vol. 7588. Lecture Notes in Computer Science. Springer, 2012, pp. 119–127. DOI: `10.1007/978-3-642-35428-1\_15`. URL: `https://doi.org/10.1007/978-3-642-35428-1%5C_15`.

[89] Roberto D'Ambrosio et al. "Boosting Nearest Neighbors for the Efficient Estimation of Posteriors". In: *Machine Learning and Knowledge Discovery in Databases - European Conference, ECML PKDD 2012, Bristol, UK, September 24-28, 2012. Proceedings, Part I*. Ed. by Peter A. Flach, Tijl De Bie, and Nello Cristianini. Vol. 7523. Lecture Notes in Computer Science. Springer, 2012, pp. 314–329. DOI: `10.1007/978-3-642-33460-3\_26`. URL: `https://doi.org/10.1007/978-3-642-33460-3%5C_26`.

[90] Meizhu Liu et al. "Shape Retrieval Using Hierarchical Total Bregman Soft Clustering". In: *IEEE Trans. Pattern Anal. Mach. Intell.* 34.12 (2012), pp. 2407–2419. DOI: `10.1109/TPAMI.2012.44`. URL: `https://doi.org/10.1109/TPAMI.2012.44`.

[91] Frank Nielsen. "Closed-form information-theoretic divergences for statistical mixtures". In: *Proceedings of the 21st International Conference on Pattern Recognition, ICPR 2012, Tsukuba, Japan, November 11-15, 2012*. IEEE Computer Society, 2012, pp. 1723–1726. URL: `https://ieeexplore.ieee.org/document/6460482/`.

[92]   Frank Nielsen. "K-MLE: A fast algorithm for learning statistical mixture models". In: *2012 IEEE International Conference on Acoustics, Speech and Signal Processing, ICASSP 2012, Kyoto, Japan, March 25-30, 2012*. IEEE, 2012, pp. 869–872. DOI: `10.1109/ICASSP.2012.6288022`. URL: `https://doi.org/10.1109/ICASSP.2012.6288022`.

[93]   Frank Nielsen. "Perspective dragging: quick area selection in photos". In: *SIGGRAPH Asia 2012 Poster Proceedings, Singapore, Singapore, November 28 - December 01, 2012*. Ed. by Qunsheng Peng and Haizhou Li. ACM, 2012, p. 18. DOI: `10.1145/2407156.2407177`. URL: `https://doi.org/10.1145/2407156.2407177`.

[94]   Frank Nielsen et al. "Jensen divergence based SPD matrix means and applications". In: *Proceedings of the 21st International Conference on Pattern Recognition, ICPR 2012, Tsukuba, Japan, November 11-15, 2012*. IEEE Computer Society, 2012, pp. 2841–2844. URL: `https://ieeexplore.ieee.org/document/6460757/`.

[95]   Richard Nock et al. "Boosting k-NN for Categorization of Natural Scenes". In: *Int. J. Comput. Vis.* 100.3 (2012), pp. 294–314. DOI: `10.1007/s11263-012-0539-2`. URL: `https://doi.org/10.1007/s11263-012-0539-2`.

[96]   Paolo Piro et al. "Leveraging k-NN for generic classification boosting". In: *Neurocomputing* 80 (2012), pp. 3–9. DOI: `10.1016/j.neucom.2011.07.026`. URL: `https://doi.org/10.1016/j.neucom.2011.07.026`.

[97]   Olivier Schwander and Frank Nielsen. "Model centroids for the simplification of Kernel Density estimators". In: *2012 IEEE International Conference on Acoustics, Speech and Signal Processing, ICASSP 2012, Kyoto, Japan, March 25-30, 2012*. IEEE, 2012, pp. 737–740. DOI: `10.1109/ICASSP.2012.6287989`. URL: `https://doi.org/10.1109/ICASSP.2012.6287989`.

[98]   Olivier Schwander et al. "k-MLE for mixtures of generalized Gaussians". In: *Proceedings of the 21st International Conference on Pattern Recognition, ICPR 2012, Tsukuba, Japan, November 11-15, 2012*. IEEE Computer Society, 2012, pp. 2825–2828. URL: `https://ieeexplore.ieee.org/document/6460753/`.

[99]   Thomas Houit and Frank Nielsen. "Video Stippling". In: *Advances Concepts for Intelligent Vision Systems - 13th International Conference, ACIVS 2011, Ghent, Belgium, August 22-25, 2011. Proceedings*. Ed. by Jacques Blanc-Talon et al. Vol. 6915. Lecture Notes in Computer Science. Springer, 2011, pp. 384–395. DOI: `10.1007/978-3-642-23687-7\_35`. URL: `https://doi.org/10.1007/978-3-642-23687-7%5C_35`.

[100] Frank Nielsen and Sylvain Boltz. "The Burbea-Rao and Bhattacharyya Centroids". In: *IEEE Trans. Inf. Theory* 57.8 (2011), pp. 5455–5466. DOI: `10.1109/TIT.2011.2159046`. URL: `https://doi.org/10.1109/TIT.2011.2159046`.

[101] Frank Nielsen and Richard Nock. "Skew Jensen-Bregman Voronoi Diagrams". In: *Trans. Comput. Sci.* 14 (2011), pp. 102–128. DOI: `10.1007/978-3-642-25249-5\_4`. URL: `https://doi.org/10.1007/978-3-642-25249-5%5C_4`.

[102] Richard Nock et al. "On tracking portfolios with certainty equivalents on a generalization of Markowitz model: the Fool, the Wise and the Adaptive". In: *Proceedings of the 28th International Conference on Machine Learning, ICML 2011, Bellevue, Washington, USA, June 28 - July 2, 2011*. Ed. by Lise Getoor and Tobias Scheffer. Omnipress, 2011, pp. 73–80. URL: `https://icml.cc/2011/papers/63%5C_icmlpaper.pdf`.

[103] Olivier Schwander and Frank Nielsen. "Non-flat clustering with alpha-divergences". In: *Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2011, May 22-27, 2011, Prague Congress Center, Prague, Czech Republic*. IEEE, 2011, pp. 2100–2103. DOI: `10.1109/ICASSP.2011.5946740`. URL: `https://doi.org/10.1109/ICASSP.2011.5946740`.

[104] Baba C. Vemuri et al. "Total Bregman Divergence and Its Applications to DTI Analysis". In: *IEEE Trans. Medical Imaging* 30.2 (2011), pp. 475–483. DOI: 10.1109/TMI.2010.2086464. URL: https://doi.org/10.1109/TMI.2010.2086464.

[105] Jean-Daniel Boissonnat, Frank Nielsen, and Richard Nock. "Bregman Voronoi Diagrams". In: *Discret. Comput. Geom.* 44.2 (2010), pp. 281–307. DOI: 10.1007/s00454-010-9256-1. URL: https://doi.org/10.1007/s00454-010-9256-1.

[106] Sylvain Boltz and Frank Nielsen. "Randomized motion estimation". In: *Proceedings of the International Conference on Image Processing, ICIP 2010, September 26-29, Hong Kong, China.* IEEE, 2010, pp. 781–784. DOI: 10.1109/ICIP.2010.5652514. URL: https://doi.org/10.1109/ICIP.2010.5652514.

[107] Sylvain Boltz, Frank Nielsen, and Stefano Soatto. "Earth Mover Distance on superpixels". In: *Proceedings of the International Conference on Image Processing, ICIP 2010, September 26-29, Hong Kong, China.* IEEE, 2010, pp. 4597–4600. DOI: 10.1109/ICIP.2010.5651708. URL: https://doi.org/10.1109/ICIP.2010.5651708.

[108] Sylvain Boltz, Frank Nielsen, and Stefano Soatto. "Texture Regimes for Entropy-Based Multiscale Image Analysis". In: *Computer Vision - ECCV 2010, 11th European Conference on Computer Vision, Heraklion, Crete, Greece, September 5-11, 2010, Proceedings, Part III.* Ed. by Kostas Daniilidis, Petros Maragos, and Nikos Paragios. Vol. 6313. Lecture Notes in Computer Science. Springer, 2010, pp. 692–705. DOI: 10.1007/978-3-642-15558-1_50. URL: https://doi.org/10.1007/978-3-642-15558-1%5C_50.

[109] Vincent Garcia and Frank Nielsen. "Simplification and hierarchical representations of mixtures of exponential families". In: *Signal Process.* 90.12 (2010), pp. 3197–3212. DOI: 10.1016/j.sigpro.2010.05.024. URL: https://doi.org/10.1016/j.sigpro.2010.05.024.

[110] Vincent Garcia, Frank Nielsen, and Richard Nock. "Hierarchical Gaussian Mixture Model". In: *Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2010, 14-19 March 2010, Sheraton Dallas Hotel, Dallas, Texas, USA.* IEEE, 2010, pp. 4070–4073.

[111] Vincent Garcia et al. "K-nearest neighbor search: Fast GPU-based implementations and application to high-dimensional feature matching". In: *Proceedings of the International Conference on Image Processing, ICIP 2010, September 26-29, Hong Kong, China.* IEEE, 2010, pp. 3757–3760. DOI: 10.1109/ICIP.2010.5654017. URL: https://doi.org/10.1109/ICIP.2010.5654017.

[112] Meizhu Liu et al. "Total Bregman divergence and its applications to shape retrieval". In: *The Twenty-Third IEEE Conference on Computer Vision and Pattern Recognition, CVPR 2010, San Francisco, CA, USA, 13-18 June 2010.* IEEE Computer Society, 2010, pp. 3463–3468. DOI: 10.1109/CVPR.2010.5539979. URL: https://doi.org/10.1109/CVPR.2010.5539979.

[113] Frank Nielsen, Sylvain Boltz, and Olivier Schwander. "Bhattacharyya Clustering with Applications to Mixture Simplifications". In: *20th International Conference on Pattern Recognition, ICPR 2010, Istanbul, Turkey, 23-26 August 2010.* IEEE Computer Society, 2010, pp. 1437–1440. DOI: 10.1109/ICPR.2010.355. URL: https://doi.org/10.1109/ICPR.2010.355.

[114] Frank Nielsen and Richard Nock. "Entropies and cross-entropies of exponential families". In: *Proceedings of the International Conference on Image Processing, ICIP 2010, September 26-29, Hong Kong, China.* IEEE, 2010, pp. 3621–3624. DOI: 10.1109/ICIP.2010.5652054. URL: https://doi.org/10.1109/ICIP.2010.5652054.

[115] Frank Nielsen and Richard Nock. "Hyperbolic Voronoi Diagrams Made Easy". In: *Prodeedings of the 2010 International Conference on Computational Science and Its Applications, ICCSA 2010, Fukuoka, Japan, March 23-26, 2010.* Ed. by Bernady O. Apduhan et al. IEEE Computer Society, 2010, pp. 74–80. DOI: 10.1109/ICCSA.2010.37. URL: https://doi.org/10.1109/ICCSA.2010.37.

[116] Frank Nielsen and Richard Nock. "Jensen-Bregman Voronoi Diagrams and Centroidal Tessellations". In: *Seventh International Symposium on Voronoi Diagrams in Science and Engineering, ISVD 2010, Quebec, Canada, June 28-30, 2010*. Ed. by Mir Abolfazl Mostafavi. IEEE Computer Society, 2010, pp. 56–65. DOI: 10.1109/ISVD.2010.17. URL: https://doi.org/10.1109/ISVD.2010.17.

[117] Paolo Piro et al. "Boosting Bayesian MAP Classification". In: *20th International Conference on Pattern Recognition, ICPR 2010, Istanbul, Turkey, 23-26 August 2010*. IEEE Computer Society, 2010, pp. 661–665. DOI: 10.1109/ICPR.2010.167. URL: https://doi.org/10.1109/ICPR.2010.167.

[118] Paolo Piro et al. "K-NN boosting prototype learning for object classification". In: *11th International Workshop on Image Analysis for Multimedia Interactive Services, WIAMIS 2010, Desenzano del Garda, Italy, April 12-14, 2010*. IEEE, 2010, pp. 1–4. URL: https://ieeexplore.ieee.org/document/5617684/.

[119] Paolo Piro et al. "Multi-class Leveraged κ-NN for Image Classification". In: *Computer Vision - ACCV 2010 - 10th Asian Conference on Computer Vision, Queenstown, New Zealand, November 8-12, 2010, Revised Selected Papers, Part III*. Ed. by Ron Kimmel, Reinhard Klette, and Akihiro Sugimoto. Vol. 6494. Lecture Notes in Computer Science. Springer, 2010, pp. 67–81. DOI: 10.1007/978-3-642-19318-7_6. URL: https://doi.org/10.1007/978-3-642-19318-7%5C_6.

[120] Olivier Schwander and Frank Nielsen. "Reranking with Contextual Dissimilarity Measures from Representational Bregman k-Means". In: *VISAPP 2010 - Proceedings of the Fifth International Conference on Computer Vision Theory and Applications, Angers, France, May 17-21, 2010 - Volume 1*. Ed. by Paul Richard and José Braz. INSTICC Press, 2010, pp. 118–123.

[121] Vincent Garcia and Frank Nielsen. "Searching High-Dimensional Neighbours: CPU-Based Tailored Data-Structures Versus GPU-Based Brute-Force Method". In: *Computer Vision/Computer Graphics Collaboration Techniques, 4th International Conference, MIRAGE 2009, Rocquencourt, France, May 4-6, 2009. Proceedings*. Ed. by André Gagalowicz and Wilfried Philips. Vol. 5496. Lecture Notes in Computer Science. Springer, 2009, pp. 425–436. DOI: 10.1007/978-3-642-01811-4_38. URL: https://doi.org/10.1007/978-3-642-01811-4%5C_38.

[122] Vincent Garcia, Frank Nielsen, and Richard Nock. "Levels of Details for Gaussian Mixture Models". In: *Computer Vision - ACCV 2009, 9th Asian Conference on Computer Vision, Xi'an, China, September 23-27, 2009, Revised Selected Papers, Part II*. Ed. by Hongbin Zha, Rin-Ichiro Taniguchi, and Stephen J. Maybank. Vol. 5995. Lecture Notes in Computer Science. Springer, 2009, pp. 514–525. DOI: 10.1007/978-3-642-12304-7_48. URL: https://doi.org/10.1007/978-3-642-12304-7%5C_48.

[123] Frank Nielsen. *A Concise and Practical Introduction to Programming Algorithms in Java*. Undergraduate Topics in Computer Science. Springer, 2009. ISBN: 978-1-84882-338-9. DOI: 10.1007/978-1-84882-339-6. URL: https://doi.org/10.1007/978-1-84882-339-6.

[124] Frank Nielsen, ed. *Emerging Trends in Visual Computing, LIX Fall Colloquium, ETVC 2008, Palaiseau, France, November 18-20, 2008. Revised Invited Papers*. Vol. 5416. Lecture Notes in Computer Science. Springer, 2009. ISBN: 978-3-642-00825-2. DOI: 10.1007/978-3-642-00826-9. URL: https://doi.org/10.1007/978-3-642-00826-9.

[125] Frank Nielsen, Vincent Garcia, and Richard Nock. "Simplifying Gaussian mixture models via entropic quantization". In: *17th European Signal Processing Conference, EUSIPCO 2009, Glasgow, Scotland, UK, August 24-28, 2009*. IEEE, 2009, pp. 2012–2016. URL: https://ieeexplore.ieee.org/document/7077426/.

[126] Frank Nielsen and Richard Nock. "Approximating Smallest Enclosing Balls with Applications to Machine Learning". In: *Int. J. Comput. Geom. Appl.* 19.5 (2009), pp. 389–414. DOI: 10.1142/S0218195909003039. URL: https://doi.org/10.1142/S0218195909003039.

[127] Frank Nielsen and Richard Nock. "Sided and symmetrized Bregman centroids". In: *IEEE Trans. Inf. Theory* 55.6 (2009), pp. 2882–2904. DOI: 10.1109/TIT.2009.2018176. URL: https://doi.org/10.1109/TIT.2009.2018176.

[128] Frank Nielsen and Richard Nock. "The Dual Voronoi Diagrams with Respect to Representational Bregman Divergences". In: *Sixth International Symposium on Voronoi Diagrams, ISVD 2009, Copenhagen, Denmark, June 23-26, 2009*. Ed. by Francois Anton. IEEE Computer Society, 2009, pp. 71–78. DOI: 10.1109/ISVD.2009.15. URL: https://doi.org/10.1109/ISVD.2009.15.

[129] Frank Nielsen, Paolo Piro, and Michel Barlaud. "Bregman vantage point trees for efficient nearest Neighbor Queries". In: *Proceedings of the 2009 IEEE International Conference on Multimedia and Expo, ICME 2009, June 28 - July 2, 2009, New York City, NY, USA*. IEEE, 2009, pp. 878–881. DOI: 10.1109/ICME.2009.5202635. URL: https://doi.org/10.1109/ICME.2009.5202635.

[130] Frank Nielsen and Aurélien Sérandour. "Accuracy of distance metric learning algorithms". In: *Proceedings of the 2nd ACM SIGKDD Workshop on Data Mining using Matrices and Tensors, Paris, France, June 28, 2009*. Ed. by Chris H. Q. Ding and Tao Li. ACM, 2009. DOI: 10.1145/1581114.1581115. URL: https://doi.org/10.1145/1581114.1581115.

[131] Richard Nock and Frank Nielsen. "Bregman Divergences and Surrogates for Learning". In: *IEEE Trans. Pattern Anal. Mach. Intell.* 31.11 (2009), pp. 2048–2059. DOI: 10.1109/TPAMI.2008.225. URL: https://doi.org/10.1109/TPAMI.2008.225.

[132] Richard Nock et al. "Soft memberships for spectral clustering, with application to permeable language distinction". In: *Pattern Recognit.* 42.1 (2009), pp. 43–53. DOI: 10.1016/j.patcog.2008.06.024. URL: https://doi.org/10.1016/j.patcog.2008.06.024.

[133] Natalia Polouliakh et al. "G-protein coupled receptor signaling architecture of mammalian immune cells". In: *PLoS One* 4.1 (2009), e4189.

[134] Frank Nielsen. "Abstracts of the LIX Fall Colloquium 2008: Emerging Trends in Visual Computing". In: *Emerging Trends in Visual Computing, LIX Fall Colloquium, ETVC 2008, Palaiseau, France, November 18-20, 2008. Revised Invited Papers*. Ed. by Frank Nielsen. Vol. 5416. Lecture Notes in Computer Science. Springer, 2008, pp. 1–12. DOI: 10.1007/978-3-642-00826-9_1. URL: https://doi.org/10.1007/978-3-642-00826-9%5C_1.

[135] Frank Nielsen, Alexis André, and Shigeru Tajima. "Real-Time Spherical Videos from a Fast Rotating Camera". In: *Image Analysis and Recognition, 5th International Conference, ICIAR 2008, Póvoa de Varzim, Portugal, June 25-27, 2008. Proceedings*. Ed. by Aurélio C. Campilho and Mohamed S. Kamel. Vol. 5112. Lecture Notes in Computer Science. Springer, 2008, pp. 326–335. DOI: 10.1007/978-3-540-69812-8_32. URL: https://doi.org/10.1007/978-3-540-69812-8%5C_32.

[136] Frank Nielsen and Richard Nock. "Bregman sided and symmetrized centroids". In: *19th International Conference on Pattern Recognition (ICPR 2008), December 8-11, 2008, Tampa, Florida, USA*. IEEE Computer Society, 2008, pp. 1–4. DOI: 10.1109/ICPR.2008.4761794. URL: https://doi.org/10.1109/ICPR.2008.4761794.

[137] Frank Nielsen and Richard Nock. "Clustering Multivariate Normal Distributions". In: *Emerging Trends in Visual Computing, LIX Fall Colloquium, ETVC 2008, Palaiseau, France, November 18-20, 2008. Revised Invited Papers*. Ed. by Frank Nielsen. Vol. 5416. Lecture Notes in Computer Science. Springer, 2008, pp. 164–174. DOI: 10.1007/978-3-642-00826-9_7. URL: https://doi.org/10.1007/978-3-642-00826-9%5C_7.

[138] Frank Nielsen and Richard Nock. "On the smallest enclosing information disk". In: *Inf. Process. Lett.* 105.3 (2008), pp. 93–97. DOI: 10.1016/j.ipl.2007.08.007. URL: https://doi.org/10.1016/j.ipl.2007.08.007.

[139] Frank Nielsen and Richard Nock. "Quantum Voronoi diagrams and Holevo channel capacity for 1-qubit quantum states". In: *2008 IEEE International Symposium on Information Theory, ISIT 2008, Toronto, ON, Canada, July 6-11, 2008*. Ed. by Frank R. Kschischang and En-Hui Yang. IEEE, 2008, pp. 96–100. DOI: 10.1109/ISIT.2008.4594955. URL: https://doi.org/10.1109/ISIT.2008.4594955.

[140] Richard Nock and Frank Nielsen. "Intrinsic Geometries in Learning". In: *Emerging Trends in Visual Computing, LIX Fall Colloquium, ETVC 2008, Palaiseau, France, November 18-20, 2008. Revised Invited Papers.* Ed. by Frank Nielsen. Vol. 5416. Lecture Notes in Computer Science. Springer, 2008, pp. 175–215. DOI: 10.1007/978-3-642-00826-9_8. URL: https://doi.org/10.1007/978-3-642-00826-9%5C_8.

[141] Richard Nock and Frank Nielsen. "On the Efficient Minimization of Classification Calibrated Surrogates". In: *Advances in Neural Information Processing Systems 21, Proceedings of the Twenty-Second Annual Conference on Neural Information Processing Systems, Vancouver, British Columbia, Canada, December 8-11, 2008.* Ed. by Daphne Koller et al. Curran Associates, Inc., 2008, pp. 1201–1208. URL: https://proceedings.neurips.cc/paper/2008/hash/077e29b11be80ab57e1a2ecabb7da330-Abstract.html.

[142] Richard Nock and Frank Nielsen. "On the efficient minimization of convex surrogates in supervised learning". In: *19th International Conference on Pattern Recognition (ICPR 2008), December 8-11, 2008, Tampa, Florida, USA.* IEEE Computer Society, 2008, pp. 1–4. DOI: 10.1109/ICPR.2008.4761667. URL: https://doi.org/10.1109/ICPR.2008.4761667.

[143] Shigeru Owada et al. "Projection plane processing for sketch-based volume segmentation". In: *Proceedings of the 2008 IEEE International Symposium on Biomedical Imaging: From Nano to Macro, Paris, France, May 14-17, 2008.* IEEE, 2008, pp. 117–120. DOI: 10.1109/ISBI.2008.4540946. URL: https://doi.org/10.1109/ISBI.2008.4540946.

[144] Claudia Henry, Richard Nock, and Frank Nielsen. "Real Boosting a la Carte with an Application to Boosting Oblique Decision Tree". In: *IJCAI 2007, Proceedings of the 20th International Joint Conference on Artificial Intelligence, Hyderabad, India, January 6-12, 2007.* Ed. by Manuela M. Veloso. 2007, pp. 842–847. URL: http://ijcai.org/Proceedings/07/Papers/135.pdf.

[145] Frank Nielsen. "The Digital Chameleon Principle: Computing Invisibility by Rendering Transparency". In: *IEEE Computer Graphics and Applications* 27.1 (2007), pp. 90–96. DOI: 10.1109/MCG.2007.21. URL: https://doi.org/10.1109/MCG.2007.21.

[146] Frank Nielsen, Jean-Daniel Boissonnat, and Richard Nock. "On Bregman Voronoi diagrams". In: *Proceedings of the Eighteenth Annual ACM-SIAM Symposium on Discrete Algorithms, SODA 2007, New Orleans, Louisiana, USA, January 7-9, 2007.* Ed. by Nikhil Bansal, Kirk Pruhs, and Clifford Stein. SIAM, 2007, pp. 746–755. URL: http://dl.acm.org/citation.cfm?id=1283383.1283463.

[147] Frank Nielsen, Jean-Daniel Boissonnat, and Richard Nock. "Visualizing bregman voronoi diagrams". In: *Proceedings of the 23rd ACM Symposium on Computational Geometry, Gyeongju, South Korea, June 6-8, 2007.* Ed. by Jeff Erickson. ACM, 2007, pp. 121–122. DOI: 10.1145/1247069.1247089. URL: https://doi.org/10.1145/1247069.1247089.

[148] Frank Nielsen and Richard Nock. "Fast Graph Segmentation Based on Statistical Aggregation Phenomena". In: *Proceedings of the IAPR Conference on Machine Vision Applications (IAPR MVA 2007), May 16-18, 2007, Tokyo, Japan.* 2007, pp. 150–153. URL: http://b2.cvl.iis.u-tokyo.ac.jp/mva/proceedings/2007CD/papers/03-30.pdf.

[149] Richard Nock and Frank Nielsen. "Self-improved gaps almost everywhere for the agnostic approximation of monomials". In: *Theor. Comput. Sci.* 377.1-3 (2007), pp. 139–150. DOI: 10.1016/j.tcs.2007.02.023. URL: https://doi.org/10.1016/j.tcs.2007.02.023.

[150] Shigeru Owada et al. "A sketching interface for modeling the internal structures of 3D shapes". In: *International Conference on Computer Graphics and Interactive Techniques, SIGGRAPH 2007, San Diego, California, USA, August 5-9, 2007, Courses.* Ed. by Sara McMains and Peter-Pike Sloan. ACM, 2007, p. 38. DOI: 10.1145/1281500.1281549. URL: https://doi.org/10.1145/1281500.1281549.

[151] Shigeru Owada et al. "Customized Slider Bars for Adjusting Multi-dimension Parameter Sets". In: *Smart Graphics, 7th International Symposium, SG 2007, Kyoto, Japan, June 25-27, 2007, Proceedings*. Ed. by Andreas Butz et al. Vol. 4569. Lecture Notes in Computer Science. Springer, 2007, pp. 230–232. DOI: 10.1007/978-3-540-73214-3_26. URL: https://doi.org/10.1007/978-3-540-73214-3%5C_26.

[152] Frank Nielsen and Richard Nock. "On approximating the smallest enclosing Bregman Balls". In: *Proceedings of the 22nd ACM Symposium on Computational Geometry, Sedona, Arizona, USA, June 5-7, 2006*. Ed. by Nina Amenta and Otfried Cheong. ACM, 2006, pp. 485–486. DOI: 10.1145/1137856.1137931. URL: https://doi.org/10.1145/1137856.1137931.

[153] Frank Nielsen and Richard Nock. "On the Smallest Enclosing Information Disk". In: *Proceedings of the 18th Annual Canadian Conference on Computational Geometry, CCCG 2006, August 14-16, 2006, Queen's University, Ontario, Canada*. 2006. URL: http://www.cs.queensu.ca/cccg/papers/cccg34.pdf.

[154] Frank Nielsen, Shigeru Owada, and Yuichi Hasegawa. "Autoframing: A Recommendation System for Detecting Undesirable Elements and Cropping Automatically Photos". In: *Proceedings of the 2006 IEEE International Conference on Multimedia and Expo, ICME 2006, July 9-12 2006, Toronto, Ontario, Canada*. IEEE Computer Society, 2006, pp. 417–420. DOI: 10.1109/ICME.2006.262525. URL: https://doi.org/10.1109/ICME.2006.262525.

[155] Richard Nock and Frank Nielsen. "A Real Generalization of Discrete AdaBoost". In: *ECAI 2006, 17th European Conference on Artificial Intelligence, August 29 - September 1, 2006, Riva del Garda, Italy, Including Prestigious Applications of Intelligent Systems (PAIS 2006), Proceedings*. Ed. by Gerhard Brewka et al. Vol. 141. Frontiers in Artificial Intelligence and Applications. IOS Press, 2006, pp. 509–515.

[156] Richard Nock and Frank Nielsen. "On Weighting Clustering". In: *IEEE Trans. Pattern Anal. Mach. Intell.* 28.8 (2006), pp. 1223–1235. DOI: 10.1109/TPAMI.2006.168. URL: https://doi.org/10.1109/TPAMI.2006.168.

[157] Richard Nock et al. "Soft Uncoupling of Markov Chains for Permeable Language Distinction: A New Algorithm". In: *ECAI 2006, 17th European Conference on Artificial Intelligence, August 29 - September 1, 2006, Riva del Garda, Italy, Including Prestigious Applications of Intelligent Systems (PAIS 2006), Proceedings*. Ed. by Gerhard Brewka et al. Vol. 141. Frontiers in Artificial Intelligence and Applications. IOS Press, 2006, pp. 823–824.

[158] Shigeru Owada, Frank Nielsen, and Takeo Igarashi. "Copy-Paste Synthesis of 3D Geometry with Repetitive Patterns". In: *Smart Graphics, 6th International Symposium, SG 2006, Vancouver, Canada, July 23-25, 2006, Proceedings*. Ed. by Andreas Butz et al. Vol. 4073. Lecture Notes in Computer Science. Springer, 2006, pp. 184–193. DOI: 10.1007/11795018_17. URL: https://doi.org/10.1007/11795018%5C_17.

[159] Shigeru Owada et al. "A sketching interface for modeling the internal structures of 3D shapes". In: *International Conference on Computer Graphics and Interactive Techniques, SIGGRAPH 2006, Boston, Massachusetts, USA, July 30 - August 3, 2006, Courses*. Ed. by John W. Finnegan and Dave Shreiner. ACM, 2006, p. 12. DOI: 10.1145/1185657.1185773. URL: https://doi.org/10.1145/1185657.1185773.

[160] Paul Agron, Leo Bachmair, and Frank Nielsen. "A Visual Interactive Framework for Formal Derivation". In: *Computational Science - ICCS 2005, 5th International Conference, Atlanta, GA, USA, May 22-25, 2005, Proceedings, Part I*. Ed. by Vaidy S. Sunderam et al. Vol. 3514. Lecture Notes in Computer Science. Springer, 2005, pp. 1019–1026. DOI: 10.1007/11428831_127. URL: https://doi.org/10.1007/11428831%5C_127.

[161] Frank Nielsen. "Surround video: a multihead camera approach". In: *Vis. Comput.* 21.1-2 (2005), pp. 92–103. DOI: 10.1007/s00371-004-0273-z. URL: https://doi.org/10.1007/s00371-004-0273-z.

14

[162] Frank Nielsen and Richard Nock. "A fast deterministic smallest enclosing disk approximation algorithm". In: *Inf. Process. Lett.* 93.6 (2005), pp. 263–268. DOI: `10.1016/j.ipl.2004.12.006`. URL: `https://doi.org/10.1016/j.ipl.2004.12.006`.

[163] Frank Nielsen and Richard Nock. "ClickRemoval: interactive pinpoint image object removal". In: *Proceedings of the 13th ACM International Conference on Multimedia, Singapore, November 6-11, 2005*. Ed. by HongJiang Zhang et al. ACM, 2005, pp. 315–318. DOI: `10.1145/1101149.1101214`. URL: `https://doi.org/10.1145/1101149.1101214`.

[164] Frank Nielsen and Richard Nock. "Interactive Pinpoint Image Object Removal". In: *2005 IEEE Computer Society Conference on Computer Vision and Pattern Recognition (CVPR 2005), 20-26 June 2005, San Diego, CA, USA*. IEEE Computer Society, 2005, p. 1191. DOI: `10.1109/CVPR.2005.193`. URL: `https://doi.org/10.1109/CVPR.2005.193`.

[165] Frank Nielsen and Richard Nock. "Interactive Point-and-Click Segmentation for Object Removal in Digital Images". In: *Computer Vision in Human-Computer Interaction, ICCV 2005 Workshop on HCI, Beijing, China, October 21, 2005, Proceedings*. Ed. by Nicu Sebe, Michael S. Lew, and Thomas S. Huang. Vol. 3766. Lecture Notes in Computer Science. Springer, 2005, pp. 131–140. DOI: `10.1007/11573425\_13`. URL: `https://doi.org/10.1007/11573425%5C_13`.

[166] Richard Nock and Frank Nielsen. "Fitting the Smallest Enclosing Bregman Ball". In: *Machine Learning: ECML 2005, 16th European Conference on Machine Learning, Porto, Portugal, October 3-7, 2005, Proceedings*. Ed. by João Gama et al. Vol. 3720. Lecture Notes in Computer Science. Springer, 2005, pp. 649–656. DOI: `10.1007/11564096\_65`. URL: `https://doi.org/10.1007/11564096%5C_65`.

[167] Richard Nock and Frank Nielsen. "Semi-supervised statistical region refinement for color image segmentation". In: *Pattern Recognit.* 38.6 (2005), pp. 835–846. DOI: `10.1016/j.patcog.2004.11.009`. URL: `https://doi.org/10.1016/j.patcog.2004.11.009`.

[168] Shigeru Owada, Frank Nielsen, and Takeo Igarashi. "Volume catcher". In: *Proceedings of the 2005 Symposium on Interactive 3D Graphics, SI3D 2005, April 3-6, 2005, Washington, DC, USA*. Ed. by Anselmo Lastra et al. ACM, 2005, pp. 111–116. DOI: `10.1145/1053427.1053445`. URL: `https://doi.org/10.1145/1053427.1053445`.

[169] Frank Nielsen and Richard Nock. "Approximating Smallest Enclosing Balls". In: *Computational Science and Its Applications - ICCSA 2004, International Conference, Assisi, Italy, May 14-17, 2004, Proceedings, Part III*. Ed. by Antonio Laganà et al. Vol. 3045. Lecture Notes in Computer Science. Springer, 2004, pp. 147–157. DOI: `10.1007/978-3-540-24767-8\_16`. URL: `https://doi.org/10.1007/978-3-540-24767-8%5C_16`.

[170] Frank Nielsen and Richard Nock. "Approximating smallest enclosing disks". In: *Proceedings of the 16th Canadian Conference on Computational Geometry, CCCG'04, Concordia University, Montréal, Québec, Canada, August 9-11, 2004*. 2004, pp. 124–127. URL: `http://www.cccg.ca/proceedings/2004/16.pdf`.

[171] Richard Nock and Frank Nielsen. "An Abstract Weighting Framework for Clustering Algorithms". In: *Proceedings of the Fourth SIAM International Conference on Data Mining, Lake Buena Vista, Florida, USA, April 22-24, 2004*. Ed. by Michael W. Berry et al. SIAM, 2004, pp. 200–209. DOI: `10.1137/1.9781611972740.19`. URL: `https://doi.org/10.1137/1.9781611972740.19`.

[172] Richard Nock and Frank Nielsen. "Grouping with Bias Revisited". In: *2004 IEEE Computer Society Conference on Computer Vision and Pattern Recognition (CVPR 2004), with CD-ROM, 27 June - 2 July 2004, Washington, DC, USA*. IEEE Computer Society, 2004, pp. 460–465. DOI: `10.1109/CVPR.2004.120`. URL: `http://doi.ieeecomputersociety.org/10.1109/CVPR.2004.120`.

[173] Richard Nock and Frank Nielsen. "Improving Clustering Algorithms through Constrained Convex Optimization". In: *17th International Conference on Pattern Recognition, ICPR 2004, Cambridge, UK, August 23-26, 2004*. IEEE Computer Society, 2004, pp. 557–560. DOI: `10.1109/ICPR.2004.1333833`. URL: `https://doi.org/10.1109/ICPR.2004.1333833`.

15

[174] Richard Nock and Frank Nielsen. "On domain-partitioning induction criteria: worst-case bounds for the worst-case based". In: *Theor. Comput. Sci.* 321.2-3 (2004), pp. 371–382. DOI: 10.1016/j.tcs.2004.05.004. URL: https://doi.org/10.1016/j.tcs.2004.05.004.

[175] Richard Nock and Frank Nielsen. "Statistical Region Merging". In: *IEEE Trans. Pattern Anal. Mach. Intell.* 26.11 (2004), pp. 1452–1458. DOI: 10.1109/TPAMI.2004.110. URL: https://doi.org/10.1109/TPAMI.2004.110.

[176] Frank Nielsen. "Plenoptic path and its applications". In: *Proceedings of the 2003 International Conference on Image Processing, ICIP 2003, Barcelona, Catalonia, Spain, September 14-18, 2003*. IEEE, 2003, pp. 793–796. DOI: 10.1109/ICIP.2003.1247081. URL: https://doi.org/10.1109/ICIP.2003.1247081.

[177] Frank Nielsen and Richard Nock. "On Region Merging: The Statistical Soundness of Fast Sorting, with Applications". In: *2003 IEEE Computer Society Conference on Computer Vision and Pattern Recognition (CVPR 2003), 16-22 June 2003, Madison, WI, USA*. IEEE Computer Society, 2003, pp. 19–26. DOI: 10.1109/CVPR.2003.1211447. URL: https://doi.org/10.1109/CVPR.2003.1211447.

[178] Shigeru Owada, Yoshihisa Shinagawa, and Frank Nielsen. "Enumeration of Contour Correspondence". In: *Int. J. Image Graph.* 3.4 (2003), pp. 609–628. DOI: 10.1142/S0219467803001214. URL: https://doi.org/10.1142/S0219467803001214.

[179] Shigeru Owada et al. "A Sketching Interface for Modeling the Internal Structures of 3D Shapes". In: *Smart Graphics, Third International Symposium, SG 2003, Heidelberg, Germany, July 2-4, 2003, Proceedings*. Ed. by Andreas Butz, Antonio Krüger, and Patrick Olivier. Vol. 2733. Lecture Notes in Computer Science. Springer, 2003, pp. 49–57. DOI: 10.1007/3-540-37620-8_5. URL: https://doi.org/10.1007/3-540-37620-8%5C_5.

[180] Frank Nielsen. "High Resolution Full Spherical Videos". In: *2002 International Symposium on Information Technology (ITCC 2002), 8-10 April 2002, Las Vegas, NV, USA*. IEEE Computer Society, 2002, pp. 260–267. DOI: 10.1109/ITCC.2002.1000397. URL: https://doi.org/10.1109/ITCC.2002.1000397.

[181] Tatsuo Yotsukura et al. "HyperMask - projecting a talking head onto a real object". In: *Vis. Comput.* 18.2 (2002), pp. 111–120. DOI: 10.1007/s003710100140. URL: https://doi.org/10.1007/s003710100140.

[182] Patrice Calégari et al. "Combinatorial optimization algorithms for radio network planning". In: *Theor. Comput. Sci.* 263.1-2 (2001), pp. 235–245. DOI: 10.1016/S0304-3975(00)00245-0. URL: https://doi.org/10.1016/S0304-3975(00)00245-0.

[183] Shigeo Morishima et al. "HYPER MASK - Projecting a Virtual Face onto a Moving Real Object". In: *22nd Annual Conference of the European Association for Computer Graphics, Eurographics 2001 - Short Presentations, Manchester, UK, September 3-7, 2001*. Ed. by Jonathan C. Roberts. Eurographics Association, 2001. DOI: 10.2312/egs.20011014. URL: https://doi.org/10.2312/egs.20011014.

[184] Frank Nielsen. "On point covers of c-oriented polygons". In: *Theor. Comput. Sci.* 263.1-2 (2001), pp. 17–29. DOI: 10.1016/S0304-3975(00)00227-9. URL: https://doi.org/10.1016/S0304-3975(00)00227-9.

[185] Frank Nielsen and Nicolas de Mauroy. "On the precision of textures". In: *IEICE Transactions on Information and Systems* 84.12 (2001), pp. 1684–1689.

[186] Matthew J. Katz, Frank Nielsen, and Michael Segal. "Maintenance of a Percing Set for Intervals with Applications". In: *Algorithms and Computation, 11th International Conference, ISAAC 2000, Taipei, Taiwan, December 18-20, 2000, Proceedings*. Ed. by D. T. Lee and Shang-Hua Teng. Vol. 1969. Lecture Notes in Computer Science. Springer, 2000, pp. 552–563. DOI: 10.1007/3-540-40996-3_47. URL: https://doi.org/10.1007/3-540-40996-3%5C_47.

[187]   Matthew J. Katz, Frank Nielsen, and Michael Segal. "Shooter Location through Piercing Sets". In: *EuroCG*. 2000, pp. 55–58.

[188]   F Nielsen. "Adaptive randomized algorithms for mosaicing systems". In: *Transactions of the Institute of Electronics, Information, and Communication Engineers (IEICE), Information and Systems E83-D (7)* (2000), pp. 1386–1394.

[189]   Frank Nielsen. "Fast stabbing of boxes in high dimensions". In: *Theor. Comput. Sci.* 246.1-2 (2000), pp. 53–72. DOI: `10.1016/S0304-3975(98)00336-3`. URL: `https://doi.org/10.1016/S0304-3975(98)00336-3`.

[190]   Frank Nielsen and Nicolas de Mauroy. "On the Precision of Textures". In: *Proceedings of the IAPR Conference on Machine Vision Applications (IAPR MVA 2000), November 28-30, 2000, Tokyo, Japan.* 2000, pp. 31–34. URL: `http://b2.cvl.iis.u-tokyo.ac.jp/mva/proceedings/CommemorativeDVD/2000/papers/2000031.pdf`.

[191]   Claudio S. Pinhanez, Frank Nielsen, and Kim Binsted. "Projecting computer graphics on moving surfaces: a simple calibration and tracking method". In: *Proceedings of the 26th Annual Conference on Computer Graphics and Interactive Techniques, SIGGRAPH 1999, Los Angeles, CA, USA, August 8-13, 1999, Abstracts and Applications.* Ed. by Jodi Giroux, Anne Richardson, and Jill Smolin. ACM, 1999, p. 266. DOI: `10.1145/311625.312166`. URL: `https://doi.org/10.1145/311625.312166`.

[192]   Frank Nielsen. "Grouping and Querying: A Paradigm to Get Output-Sensitive Algorithms". In: *Discrete and Computational Geometry, Japanese Conference, JCDCG'98, Tokyo, Japan, December 9-12, 1998, Revised Papers.* Ed. by Jin Akiyama, Mikio Kano, and Masatsugu Urabe. Vol. 1763. Lecture Notes in Computer Science. Springer, 1998, pp. 250–257. DOI: `10.1007/978-3-540-46515-7\_21`. URL: `https://doi.org/10.1007/978-3-540-46515-7%5C_21`.

[193]   Frank Nielsen. "On point covers of c-oriented polygons". In: *Proceedings of the 10th Canadian Conference on Computational Geometry, McGill University, Montréal, Québec, Canada, August 10-12, 1998.* 1998. URL: `http://cgm.cs.mcgill.ca/cccg98/proceedings/cccg98-nielsen-point.ps.gz`.

[194]   Frank Nielsen. "Randomized Adaptive Algorithms for Mosaicing Systems". In: *Proceedings of IAPR Workshop on Machine Vision Applications, MVA 1998, November 17-19, 1998, Chiba, Japan.* 1998, pp. 11–14. URL: `http://b2.cvl.iis.u-tokyo.ac.jp/mva/proceedings/CommemorativeDVD/1998/papers/1998011.pdf`.

[195]   Frank Nielsen and Mariette Yvinec. "Output-Sensitive Convex Hull Algorithms of Planar Convex Objects". In: *Int. J. Comput. Geom. Appl.* 8.1 (1998), pp. 39–66. DOI: `10.1142/S0218195998000047`. URL: `https://doi.org/10.1142/S0218195998000047`.

[196]   Alon Efrat et al. "Dynamic Data Structures for Fat Objects and Their Applications". In: *Algorithms and Data Structures, 5th International Workshop, WADS '97, Halifax, Nova Scotia, Canada, August 6-8, 1997, Proceedings.* Ed. by Frank K. H. A. Dehne et al. Vol. 1272. Lecture Notes in Computer Science. Springer, 1997, pp. 297–306. DOI: `10.1007/3-540-63307-3\_69`. URL: `https://doi.org/10.1007/3-540-63307-3%5C_69`.

[197]   Matthew J. Katz and Frank Nielsen. "On Piercing Sets of Objects". In: *Proceedings of the Twelfth Annual Symposium on Computational Geometry, Philadelphia, PA, USA, May 24-26, 1996.* Ed. by Sue Whitesides. ACM, 1996, pp. 113–121. DOI: `10.1145/237218.237253`. URL: `https://doi.org/10.1145/237218.237253`.

[198]   Frank Nielsen. "Algorithmes géométriques adaptatifs. (Output-sensitive Computational Geometry)". PhD thesis. University of Nice Sophia Antipolis, France, 1996. URL: `https://tel.archives-ouvertes.fr/tel-00832414`.

[199]   Frank Nielsen. "Fast Stabbing of Boxes in High Dimensions". In: *Proceedings of the 8th Canadian Conference on Computational Geometry, Carleton University, Ottawa, Canada, August 12-15, 1996.* Ed. by Frank Fiala, Evangelos Kranakis, and Jörg-Rüdiger Sack. Carleton University Press, 1996, pp. 87–92. URL: `http://www.cccg.ca/proceedings/1996/cccg1996%5C_0015.pdf`.

[200]   Frank Nielsen. "Output-Sensitive Peeling of Convex and Maximal Layers". In: *Inf. Process. Lett.* 59.5 (1996), pp. 255–259. DOI: 10.1016/0020-0190(96)00116-0. URL: https://doi.org/10.1016/0020-0190(96)00116-0.