

Parlin, K & Riihonen, T 2020, Analog Mitigation of Frequency-Modulated Interference for Improved GNSS Reception. julkaisussa J Nurmi, E-S Lohan, J Torres-Sospedra, H Kuusniemi & A Ometov (toim), *2020 International Conference on Localization and GNSS, ICL-GNSS 2020 - Proceedings*. 2020 International Conference on Localization and GNSS, ICL-GNSS 2020 - Proceedings, IEEE, 2/06/20. <https://doi.org/10.1109/ICL-GNSS49876.2020.9115518>

Wang, W, Fath, T, Valkama, M & Lohan, ES 2020, Modeling and Mitigating 5G Wireless Downlink Interferences for Low-altitude Aerial vehicles. julkaisussa J Nurmi, E-S Lohan, J Torres-Sospedra, H Kuusniemi & A Ometov (toim), *2020 International Conference on Localization and GNSS, ICL-GNSS 2020 - Proceedings*. 2020 International Conference on Localization and GNSS, ICL-GNSS 2020 - Proceedings, IEEE, 2/06/20. <https://doi.org/10.1109/ICL-GNSS49876.2020.9115534>

Karttunen, A, Valkama, M & Talvitie, J 2020, Positioning Based on Noise-Limited Censored Path Loss Data. julkaisussa J Nurmi, E-S Lohan, J Torres-Sospedra, H Kuusniemi & A Ometov (toim), *2020 International Conference on Localization and GNSS, ICL-GNSS 2020 - Proceedings*. 2020 International Conference on Localization and GNSS, ICL-GNSS 2020 - Proceedings, IEEE, 2/06/20. <https://doi.org/10.1109/ICL-GNSS49876.2020.9115572>

Barneto, CB, Riihonen, T, Turunen, M, Koivisto, M, Talvitie, J & Valkama, M 2020, Radio-based Sensing and Indoor Mapping with Millimeter-Wave 5G NR Signals. julkaisussa J Nurmi, E-S Lohan, J Torres-Sospedra, H Kuusniemi & A Ometov (toim), *2020 International Conference on Localization and GNSS, ICL-GNSS 2020 - Proceedings*. 2020 International Conference on Localization and GNSS, ICL-GNSS 2020 - Proceedings, IEEE, 2/06/20. <https://doi.org/10.1109/ICL-GNSS49876.2020.9115568>

Passalis, N, Tefas, A, Kanninen, J, Gabbouj, M & Iosifidis, A 2020, Adaptive Normalization for Forecasting Limit Order Book Data Using Convolutional Neural Networks. julkaisussa *2020 IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2020 - Proceedings*. ICASSP, IEEE International Conference on Acoustics, Speech and Signal Processing - Proceedings, Vuosikerta. 2020-May, IEEE, Sivut 1713-1717, Barcelona, Espanja, 4/05/20. <https://doi.org/10.1109/ICASSP40776.2020.9054321>

Yang, M, Zhu, H, Wang, H, Koucheryavy, Y, Samouylov, K & Qian, H 2020, Peer to Peer Offloading with Delayed Feedback: An Adversary Bandit Approach. julkaisussa *2020 IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2020 - Proceedings*. ICASSP, IEEE International Conference on Acoustics, Speech and Signal Processing - Proceedings, Vuosikerta. 2020-May, IEEE, Sivut 5035-5039, Barcelona, Espanja, 4/05/20. <https://doi.org/10.1109/ICASSP40776.2020.9053680>

Tervo, O, Levanen, T, Pajukoski, K, Hulkkonen, J, Wainio, P & Valkama, M 2020, 5G new radio evolution towards sub-THz communications. julkaisussa *2nd 6G Wireless Summit 2020: Gain Edge for the 6G Era, 6G SUMMIT 2020*. IEEE, 1/01/00. <https://doi.org/10.1109/6GSUMMIT49458.2020.9083807>

Le, D, Ukkonen, L & Björninen, T 2020, Circularly Polarized Corner-Truncated and Slotted Microstrip Patch Antenna on Textile Substrate for Wearable Passive UHF RFID Tags. julkaisussa *14th European Conference on Antennas and Propagation, EuCAP 2020*. 14th European Conference on Antennas and Propagation, EuCAP 2020, IEEE, Copenhagen, Tanska, 15/03/20. <https://doi.org/10.23919/EuCAP48036.2020.9135984>

Raitoharju, M, García-Fernández, F, Hostettler, R, Piché, R & Särkkä, S 2020, 'Gaussian mixture models for signal mapping and positioning', *Signal Processing*, Vuosikerta. 168, 107330. <https://doi.org/10.1016/j.sigpro.2019.107330>

Ahmed, S, Sydänheimo, L, Ukkonen, L & Björninen, T 2020, Headband Antenna for Wireless Power Transfer to Millimeter-Sized Neural Implants with Minimal Misalignment Effects. julkaisussa *14th European Conference on Antennas and Propagation, EuCAP 2020*. 14th European Conference on Antennas and Propagation, EuCAP 2020, IEEE, Copenhagen, Tanska, 15/03/20. <https://doi.org/10.23919/EuCAP48036.2020.9135977>

Petrov, V, Eckhardt, JM, Moltchanov, D, Koucheryavy, Y & Kurner, T 2020, Measurements of Reflection and Penetration Losses in Low Terahertz Band Vehicular Communications. julkaisussa *14th European Conference on Antennas and Propagation, EuCAP 2020*. 14th European Conference on Antennas and Propagation, EuCAP 2020, Institute of Electrical and Electronics Engineers Inc., Copenhagen, Tanska, 15/03/20. <https://doi.org/10.23919/EuCAP48036.2020.9135389>

Khan, Z, He, H, Chen, X, Ukkonen, L & Virkki, J 2020, Protective Coating Methods for Glove-Integrated RFID Tags - A Preliminary Study. julkaisussa *14th European Conference on Antennas and Propagation, EuCAP 2020.*, 9135632, 14th European Conference on Antennas and Propagation, EuCAP 2020, IEEE, Copenhagen, Tanska, 15/03/20. <https://doi.org/10.23919/EuCAP48036.2020.9135632>

Eyraud, C, Sorsa, LI, Herique, A, Geffrin, JM, Pursiainen, S & Kofman, W 2020, Towards Asteroid Tomography: Modellings and Measurements Using an Analogue Model. julkaisussa *14th European Conference on Antennas and Propagation, EuCAP 2020.* 14th European Conference on Antennas and Propagation, EuCAP 2020, IEEE, Copenhagen, Tanska, 15/03/20. <https://doi.org/10.23919/EuCAP48036.2020.9136060>

Gapeyenko, M, Petrov, V, Moltchanov, D, Yeh, SP, Himayat, N & Andreev, S 2020, Comparing capacity gains of static and UAV-based millimeter-wave relays in clustered deployments. julkaisussa *2020 IEEE International Conference on Communications Workshops, ICC Workshops 2020 - Proceedings.* IEEE/CIC international conference on communications in China - workshops, IEEE, Dublin, Irlanti, 7/06/20. <https://doi.org/10.1109/ICCWorkshops49005.2020.9145216>

Belyaev, E, Codreanu, M, Juntti, M & Egiazarian, K 2020, 'Compressive sensed video recovery via iterative thresholding with random transforms', *IET Image Processing*, Vuosikerta. 14, Nro 6, Sivut 1187-1200. <https://doi.org/10.1049/iet-ipr.2019.0661>

Nasarre, IP, Levanen, T & Valkama, M 2020, Constrained PSK: Energy-efficient modulation for Sub-THz systems. julkaisussa *2020 IEEE International Conference on Communications Workshops, ICC Workshops 2020 - Proceedings.* IEEE/CIC international conference on communications in China - workshops, IEEE, Dublin, Irlanti, 7/06/20. <https://doi.org/10.1109/ICCWorkshops49005.2020.9145132>

Brihuega, A, Anttila, L, Abdelaziz, M, Eriksson, T, Tufvesson, F & Valkama, M 2020, 'Digital Predistortion for Multiuser Hybrid MIMO at mmWaves', *IEEE Transactions on Signal Processing*, Vuosikerta. 68, Sivut 3603-3618. <https://doi.org/10.1109/TSP.2020.2995972>

Ilves, M, Rantanen, V, Venesvirta, H, Lylykangas, J, Vehkaoja, A, Mäkelä, E, Verho, J, Lekkala, J, Rautiainen, M & Surakka, V 2020, 'Functional electrical stimulation for facial pacing: Effects of waveforms on movement intensity and ratings of discomfort', *Biomedical Signal Processing and Control*, Vuosikerta. 60, 101992. <https://doi.org/10.1016/j.bspc.2020.101992>

Pirhonen, M & Vehkaoja, A 2020, 'Fusion enhancement for tracking of respiratory rate through intrinsic mode functions in photoplethysmography', *Biomedical Signal Processing and Control*, Vuosikerta. 59, 101887. <https://doi.org/10.1016/j.bspc.2020.101887>

Sohrab, F, Raitoharju, J, Iosifidis, A & Gabbouj, M 2020, 'Multimodal subspace support vector data description', *Pattern Recognition*, Vuosikerta. 110, 107648. <https://doi.org/10.1016/j.patcog.2020.107648>

Magron, P & Virtanen, T 2020, 'Online Spectrogram Inversion for Low-Latency Audio Source Separation', *IEEE Signal Processing Letters*, Vuosikerta. 27, Sivut 306-310. <https://doi.org/10.1109/LSP.2020.2970310>

Genocchi, B, Cunha, A, Jain, S, Hyttinen, J, Lenk, K & Ellingsrud, AJ 2020, Parametric exploration of cellular swelling in a computational model of cortical spreading depression. julkaisussa *42nd Annual International Conferences of the IEEE Engineering in Medicine and Biology Society: Enabling Innovative Technologies for Global Healthcare, EMBC 2020.* Annual International Conference of the IEEE Engineering in Medicine and Biology Society, Vuosikerta. 2020-July, IEEE, Sivut 2491-2495, Montreal, Kanada, 20/07/20. <https://doi.org/10.1109/EMBC44109.2020.9175306>

He, H, Chen, X, Raivio, L, Huttunen, H & Virkki, J 2020, Passive RFID-based Textile Touchpad. julkaisussa *14th European Conference on Antennas and Propagation, EuCAP 2020.*, 9135201, IEEE, Copenhagen, Tanska, 15/03/20. <https://doi.org/10.23919/EuCAP48036.2020.9135201>

Tafintsev, N, Moltchanov, D, Simsek, M, Yeh, SP, Andreev, S, Koucheryavy, Y & Valkama, M 2020, Reinforcement learning for improved UAV-based integrated access and backhaul operation. julkaisussa *2020 IEEE International Conference on Communications Workshops, ICC Workshops 2020 - Proceedings.* IEEE/CIC international conference on communications in China - workshops, IEEE, Dublin, Irlanti, 7/06/20.

<https://doi.org/10.1109/ICCWorkshops49005.2020.9145423>

Gao, Y, Bregovic, R & Gotchev, A 2020, 'Self-Supervised Light Field Reconstruction Using Shearlet Transform and Cycle Consistency', *IEEE Signal Processing Letters*, Vuosikerta. 27, Sivut 1425-1429.
<https://doi.org/10.1109/LSP.2020.3008082>

Ni, X & Huttunen, H 2020, 'Vehicle Attribute Recognition by Appearance: Computer Vision Methods for Vehicle Type, Make and Model Classification', *Journal of Signal Processing Systems*. <https://doi.org/10.1007/s11265-020-01567-6>

Hassan, SS, Huttunen, H, Niemi, J & Tohka, J 2019, 'Bayesian receiver operating characteristic metric for linear classifiers', *Pattern Recognition Letters*, Vuosikerta. 128, Sivut 52-59. <https://doi.org/10.1016/j.patrec.2019.07.016>

Heljakka, K, Ihamaki, P, Tuomi, P & Saarikoski, P 2019, Gamified coding: Toy robots and playful learning in early education. julkaisussa *Proceedings - 6th Annual Conference on Computational Science and Computational Intelligence, CSCI 2019.*, 9071010, IEEE, Sivut 800-805, Las Vegas, Yhdysvallat, 5/12/19.
<https://doi.org/10.1109/CSCI49370.2019.00152>

Rostami, S, Lagen, S, Costa, M, Dini, P & Valkama, M 2019, Optimized wake-up scheme with bounded delay for energy-efficient MTC. julkaisussa *2019 IEEE Global Communications Conference, GLOBECOM 2019 - Proceedings.*, 9013534, IEEE, Waikoloa, Yhdysvallat, 9/12/19. <https://doi.org/10.1109/GLOBECOM38437.2019.9013534>

Gerasimenko, M, Pokorny, J, Schneider, T, Sirjov, J, Andreev, S & Hosek, J 2019, Prototyping directional UAV-based wireless access and backhaul systems. julkaisussa *2019 IEEE Global Communications Conference, GLOBECOM 2019 - Proceedings.*, 9014228, IEEE, Waikoloa, Yhdysvallat, 9/12/19. <https://doi.org/10.1109/GLOBECOM38437.2019.9014228>

Brihuega, A, Abdelaziz, M, Anttila, L, Barneto, CB & Valkama, M 2019, Closed-Loop DPD for Digital MIMO Transmitters under Antenna Crosstalk. julkaisussa MB Matthews (Toimittaja), *Conference Record - 53rd Asilomar Conference on Circuits, Systems and Computers, ACSSC 2019.*, 9049001, Conference Record - Asilomar Conference on Signals, Systems and Computers, Vuosikerta. 2019-November, IEEE Computer Society, Sivut 1682-1689, 3/11/19.
<https://doi.org/10.1109/IEEECONF44664.2019.9049001>

Petrov, V, Fodor, G, Andreev, S, Do, H & Sahlin, H 2019, V2X Connectivity: From LTE to Joint Millimeter Wave Vehicular Communications and Radar Sensing. julkaisussa MB Matthews (Toimittaja), *Conference Record - 53rd Asilomar Conference on Circuits, Systems and Computers, ACSSC 2019.*, 9048846, Conference Record - Asilomar Conference on Signals, Systems and Computers, Vuosikerta. 2019-November, IEEE Computer Society, Sivut 1120-1124, 3/11/19.
<https://doi.org/10.1109/IEEECONF44664.2019.9048846>

Qian, Y, Chen, K & Yu, H 2019, Fast fourier color constancy and grayness index for ISPA illumination estimation challenge. julkaisussa S Loncaric, R Bregovic, M Carli & M Subasic (toim), *ISPA 2019 - 11th International Symposium on Image and Signal Processing and Analysis*. International Symposium on Image and Signal Processing and Analysis, ISPA, Vuosikerta. 2019-September, IEEE, Sivut 352-354, Dubrovnik, Kroatia, 23/09/19.
<https://doi.org/10.1109/ISPA.2019.8868451>

Ferranti, L & Boutellier, J 2019, Towards Algebraic Modeling of GPU Memory Access for Bank Conflict Mitigation. julkaisussa *2019 IEEE International Workshop on Signal Processing Systems, SiPS 2019*. IEEE, Sivut 103-108, Nanjing, Kiina, 20/10/19. <https://doi.org/10.1109/SiPS47522.2019.9020385>

Rajput, S, Averbukh, M, Yahalom, A & Minav, T 2019, 'An approval of MPPT based on pv cell's simplified equivalent circuit during fast-shading conditions', *Electronics (Switzerland)*, Vuosikerta. 8, Nro 9, 1060.
<https://doi.org/10.3390/electronics8091060>

Garcia-Molla, VM, San Juan, P, Virtanen, T, Vidal, AM & Alonso, P 2019, 'Generalization of the K-SVD algorithm for minimization of β -divergence', *Digital Signal Processing: A Review Journal*, Vuosikerta. 92, Sivut 47-53.
<https://doi.org/10.1016/j.dsp.2019.05.001>

- Fu, J, Pertuz, S, Matas, J & Kämäräinen, J-K 2019, 'Performance analysis of single-query 6-DoF camera pose estimation in self-driving setups', *Computer Vision and Image Understanding*, Vuosikerta. 186, Sivut 58-73. <https://doi.org/10.1016/j.cviu.2019.04.009>
- Masek, P, Stusek, M, Zeman, K, Mozny, R, Ometov, A & Hosek, J 2019, A perspective on wireless M-bus for smart electricity grids. julkaisussa N Herencsar (Toimittaja), *2019 42nd International Conference on Telecommunications and Signal Processing, TSP 2019*. IEEE, Sivut 730-735, Budapest, Unkari, 1/07/19. <https://doi.org/10.1109/TSP.2019.8768840>
- Al-Sa'd, MF & Boashash, B 2019, 'Design and implementation of a multi-sensor newborn EEG seizure and background model with inter-channel field characterization', *Digital Signal Processing: A Review Journal*, Vuosikerta. 90, Sivut 71-99. <https://doi.org/10.1016/j.dsp.2019.02.003>
- Rusu, C & Astola, J 2019, Input magnitude data setting in error-reduction algorithm for one-dimensional discrete phase retrieval problem. julkaisussa *ISSCS 2019 - International Symposium on Signals, Circuits and Systems.*, 8801743, IEEE, Iasi, Romania, 11/07/19. <https://doi.org/10.1109/ISSCS.2019.8801743>
- Mozny, R, Masek, P, Stusek, M, Zeman, K, Ometov, A & Hosek, J 2019, On the performance of narrow-band internet of things (NB-IoT) for delay-tolerant services. julkaisussa N Herencsar (Toimittaja), *2019 42nd International Conference on Telecommunications and Signal Processing, TSP 2019*. 2019 42nd International Conference on Telecommunications and Signal Processing, TSP 2019, IEEE, Sivut 637-642, Budapest, Unkari, 1/07/19. <https://doi.org/10.1109/TSP.2019.8768871>
- Holm, J, Väänänen, K & Remans, MMR 2019, User Experience Study of 360° Music Videos on Computer Monitor and Virtual Reality Goggles. julkaisussa E Banissi, A Ursyn, MW McK. Bannatyne, N Datia, JM Pires, R Francese, M Sarfraz, TG Wyeld, F Bouali, G Venturin, H Azzag, M Lebbah, M Trutschl, U Cvek, H Muller, M Nakayama, S Kernbach, L Caruccio, M Risi, U Erra, A Vitiello & V Rossano (toim), *Information Visualization - Biomedical Visualization and Geometric Modelling and Imaging, IV 2019*. Proceedings of the International Conference on Information Visualisation, IEEE, Sivut 81-87, Paris, Ranska, 2/07/19. <https://doi.org/10.1109/IV.2019.00023>
- Moltchanov, D, Kovalchukov, R, Gerasimenko, M, Andreev, S, Koucheryavy, Y & Gerla, M 2019, 'Socially inspired relaying and proactive mode selection in mmWave vehicular communications', *IEEE Internet of Things Journal*, Vuosikerta. 6, Nro 3, Sivut 5172-5183. <https://doi.org/10.1109/JIOT.2019.2898420>
- Kiranyaz, S, Ince, T, Abdeljaber, O, Avci, O & Gabbouj, M 2019, 1-D Convolutional Neural Networks for Signal Processing Applications. julkaisussa *2019 IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2019 - Proceedings*. IEEE, Sivut 8360-8364, Brighton, Iso-Britannia, 12/05/19. <https://doi.org/10.1109/ICASSP.2019.8682194>
- Nogues, E, Mercat, A, Arrestier, F, Pelcat, M & Menard, D 2019, Convex Energy Optimization of Streaming Applications for MPSoCs. julkaisussa *2019 IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2019 - Proceedings*. IEEE, Sivut 1557-1561, Brighton, Iso-Britannia, 12/05/19. <https://doi.org/10.1109/ICASSP.2019.8682317>
- Purwins, H, Li, B, Virtanen, T, Schlüter, J, Chang, SY & Sainath, T 2019, 'Deep Learning for Audio Signal Processing', *IEEE Journal on Selected Topics in Signal Processing*, Vuosikerta. 13, Nro 2, Sivut 206-219. <https://doi.org/10.1109/JSTSP.2019.2908700>
- Zarkias, KS, Passalis, N, Tsantekidis, A & Tefas, A 2019, Deep Reinforcement Learning for Financial Trading Using Price Trailing. julkaisussa *2019 IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2019 - Proceedings*. IEEE, Sivut 3067-3071, Brighton, Iso-Britannia, 12/05/19. <https://doi.org/10.1109/ICASSP.2019.8683161>
- Passalis, N, Tefas, A, Kannianen, J, Gabbouj, M & Iosifidis, A 2019, Deep Temporal Logistic Bag-of-features for Forecasting High Frequency Limit Order Book Time Series. julkaisussa *2019 IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2019 - Proceedings*. IEEE, Sivut 7545-7549, Brighton, Iso-Britannia, 12/05/19. <https://doi.org/10.1109/ICASSP.2019.8682297>

Wang, S, Naithani, G & Virtanen, T 2019, Low-latency Deep Clustering for Speech Separation. julkaisussa *2019 IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2019 - Proceedings*. IEEE, Sivut 76-80, Brighton, Iso-Britannia, 12/05/19. <https://doi.org/10.1109/ICASSP.2019.8683437>

Pertuz, S, Torres, GF, Tamimi, R & Kämäräinen, J 2019, Open framework for mammography-based breast cancer risk assessment. julkaisussa *2019 IEEE EMBS International Conference on Biomedical and Health Informatics, BHI 2019 - Proceedings*. IEEE, Chicago, Yhdysvallat, 19/05/19. <https://doi.org/10.1109/BHI.2019.8834599>

Amestoy, T, Mercat, A, Hamidouche, W, Bergeron, C & Menard, D 2019, Random Forest Oriented Fast QTBT Frame Partitioning. julkaisussa *2019 IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2019 - Proceedings*. IEEE, Sivut 1837-1841, Brighton, Iso-Britannia, 12/05/19. <https://doi.org/10.1109/ICASSP.2019.8683413>

Pertilä, P & Parviainen, M 2019, Time Difference of Arrival Estimation of Speech Signals Using Deep Neural Networks with Integrated Time-frequency Masking. julkaisussa *2019 IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2019 - Proceedings*. IEEE, Sivut 436-440, Brighton, Iso-Britannia, 12/05/19. <https://doi.org/10.1109/ICASSP.2019.8682574>

Passalis, N, Mourgiyas-Alexandris, G, Tsakyridis, A, Pleros, N & Tefas, A 2019, Variance Preserving Initialization for Training Deep Neuromorphic Photonic Networks with Sinusoidal Activations. julkaisussa *2019 IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2019 - Proceedings*. IEEE, Sivut 1483-1487, Brighton, Iso-Britannia, 12/05/19. <https://doi.org/10.1109/ICASSP.2019.8682218>

Khan, MA, Vehmas, R & Visa, A 2019, Automatic detection of water inside concrete slabs using ground penetrating radar. julkaisussa *2019 IEEE Radar Conference, RadarConf 2019*. IEEE, Boston, Yhdysvallat, 22/04/19. <https://doi.org/10.1109/RADAR.2019.8835797>

Petrov, V, Moltchanov, D, Jornet, JM & Koucheryavy, Y 2019, Exploiting Multipath Terahertz Communications for Physical Layer Security in beyond 5G Networks. julkaisussa *INFOCOM 2019 - IEEE Conference on Computer Communications Workshops, INFOCOM WKSHPS 2019*. IEEE, Sivut 865-872, Paris, Ranska, 29/04/19. <https://doi.org/10.1109/INFOCOMW.2019.8845312>

Cai, D, Chen, K, Qian, Y & Kämäräinen, J-K 2019, 'Convolutional low-resolution fine-grained classification', *Pattern Recognition Letters*, Vuosikerta. 119, Sivut 166-171. <https://doi.org/10.1016/j.patrec.2017.10.020>

Yoo, SK, Cotton, SL, Sofotasios, PC, Muhaidat, S, Badarneh, OS & Karagiannidis, GK 2019, Energy Detection-Based Spectrum Sensing over Fisher-Snedecor F Fading Channels. julkaisussa *2018 IEEE Global Communications Conference*. , 8647778, IEEE, Abu Dhabi, Yhdistyneet arabiemiirikunnat, 9/12/18. <https://doi.org/10.1109/GLOCOM.2018.8647778>

Kovalchukov, R, Moltchanov, D, Begishev, V, Samuylov, A, Andreev, S, Koucheryavy, Y & Samouylov, K 2019, Improved Session Continuity in 5G NR with Joint Use of Multi-Connectivity and Guard Bandwidth. julkaisussa *2018 IEEE Global Communications Conference, GLOBECOM 2018*. IEEE, Abu Dhabi, Yhdistyneet arabiemiirikunnat, 9/12/18. <https://doi.org/10.1109/GLOCOM.2018.8647608>

Al-Ars, Z, van der Vlugt, S, Jääskeläinen, P & van der Linden, F 2019, 'ALMARVI System Solution for Image and Video Processing in Healthcare, Surveillance and Mobile Applications', *Journal of Signal Processing Systems*, Vuosikerta. 91, Nro 1, Sivut 1-7. <https://doi.org/10.1007/s11265-018-1423-2>

Pascual Campo, P, Lampu, V, Meirhaeghe, A, Boutellier, J, Anttila, L & Valkama, M 2019, 'Digital Predistortion for 5G Small Cell: GPU Implementation and RF Measurements', *Journal of Signal Processing Systems*. <https://doi.org/10.1007/s11265-019-01502-4>

Meirhaeghe, A, Boutellier, J & Collin, J 2019, The Direction Cosine Matrix Algorithm in Fixed-point: Implementation and Analysis. julkaisussa *ICASSP 2019 - 2019 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)*. IEEE, Brighton, Iso-Britannia, 12/05/19. <https://doi.org/10.1109/ICASSP.2019.8683644>

Schwarz, S, Sheikhipour, N, Fakour Sevom, V & Hannuksela, MM 2019, 'Video coding of dynamic 3D point cloud data', *APSIPA Transactions on Signal and Information Processing*. <https://doi.org/10.1017/ATSIP.2019.24>

Mahkonen, K, Virtanen, T & Kämäräinen, J 2018, 'Cascade of Boolean detector combinations', *Eurasip Journal on Image and Video Processing*, Vuosikerta. 2018, 61. <https://doi.org/10.1186/s13640-018-0303-9>

Sapio, A, Bhattacharyya, SS & Wolf, M 2018, Efficient Solving of Markov Decision Processes on GPUs Using Parallelized Sparse Matrices. julkaisussa *2018 Conference on Design and Architectures for Signal and Image Processing, DASIP 2018*. Conference on Design and Architectures for Signal and Image Processing, DASIP, IEEE COMPUTER SOCIETY PRESS, Sivut 13-18, Porto, Portugali, 10/10/18. <https://doi.org/10.1109/DASIP.2018.8596969>

Mesaros, A, Heittola, T & Virtanen, T 2018, Acoustic scene classification: An overview of dcase 2017 challenge entries. julkaisussa *16th International Workshop on Acoustic Signal Enhancement, IWAENC 2018*. IEEE, Sivut 411-415, Tokyo, Japani, 17/09/18. <https://doi.org/10.1109/IWAENC.2018.8521242>

Shuyang, Z, Heittola, T & Virtanen, T 2018, An active learning method using clustering and committee-based sample selection for sound event classification. julkaisussa *16th International Workshop on Acoustic Signal Enhancement, IWAENC 2018*. IEEE, Sivut 116-120, Tokyo, Japani, 17/09/18. <https://doi.org/10.1109/IWAENC.2018.8521336>

Naithani, G, Nikunen, J, Bramslow, L & Virtanen, T 2018, Deep neural network based speech separation optimizing an objective estimator of intelligibility for low latency applications. julkaisussa *16th International Workshop on Acoustic Signal Enhancement, IWAENC 2018*. IEEE, Sivut 386-390, Tokyo, Japani, 17/09/18. <https://doi.org/10.1109/IWAENC.2018.8521379>

Nikunen, J & Politis, A 2018, Multichannel NMF for source separation with ambisonic signals. julkaisussa *16th International Workshop on Acoustic Signal Enhancement, IWAENC 2018*. IEEE, Sivut 251-255, Tokyo, Japani, 17/09/18. <https://doi.org/10.1109/IWAENC.2018.8521344>

Parviainen, M, Pertila, P, Virtanen, T & Grosche, P 2018, Time-frequency masking strategies for single-channel low-latency speech enhancement using neural networks. julkaisussa *16th International Workshop on Acoustic Signal Enhancement, IWAENC 2018*. IEEE, Sivut 51-55, Tokyo, Japani, 17/09/18. <https://doi.org/10.1109/IWAENC.2018.8521400>

Huang, G, Heittola, T & Virtanen, T 2018, Using sequential information in polyphonic sound event detection. julkaisussa *16th International Workshop on Acoustic Signal Enhancement, IWAENC 2018*. IEEE, Sivut 291-295, Tokyo, Japani, 17/09/18. <https://doi.org/10.1109/IWAENC.2018.8521367>

Nurminen, H, Ardeshiri, T, Piche, R & Gustafsson, F 2018, 'Skew-t Filter and Smoother with Improved Covariance Matrix Approximation', *IEEE Transactions on Signal Processing*, Vuosikerta. 66, Nro 21, Sivut 5618-5633. <https://doi.org/10.1109/TSP.2018.2865434>

Hautala, I, Boutellier, J, Nyländén, T & Silvén, O 2018, 'Toward Efficient Execution of RVC-CAL Dataflow Programs on Multicore Platforms', *Journal of Signal Processing Systems*, Vuosikerta. 90, Nro 11, Sivut 1507-1517. <https://doi.org/10.1007/s11265-018-1339-x>

Acimovic, J, Teppola, H, Mäki-Marttunen, TM & Linne, M-L 2018, 'Data-driven study of synchronous population activity in generic spiking neuronal networks: How much do we capture using the minimal model for the considered phenomena?', *BMC Neuroscience*, Vuosikerta. 19, Nro Suppl 2, Sivut 68-69.

Niemi, J & Tanntu, J 2018, 'Deep Learning Case Study for Automatic Bird Identification', *Applied Sciences (Switzerland)*, Vuosikerta. 8, Nro 11, 2089. <https://doi.org/10.3390/app8112089>

Tripathy, SR, Chakravarty, K & Sinha, A 2018, Eigen Posture Based Fall Risk Assessment System Using Kinect. julkaisussa *40th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, EMBC 2018*. Vuosikerta. 2018-July, 8513263, IEEE, Sivut 1-4, Honolulu, Yhdysvallat, 18/07/18. <https://doi.org/10.1109/EMBC.2018.8513263>

Mehrang, S, Jauhiainen, M, Pietilä, J, Puustinen, J, Ruokolainen, J & Nieminen, H 2018, Identification of Parkinson's Disease Utilizing a Single Self-recorded 20-step Walking Test Acquired by Smartphone's Inertial Measurement Unit. julkaisussa *40th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, EMBC 2018*. Vuosikerta. 2018-July, 8512921, Institute of Electrical and Electronics Engineers Inc., Sivut 2913-2916, 18/07/18. <https://doi.org/10.1109/EMBC.2018.8512921>

Tarniceriu, A, Harju, J, Yousefi, ZR, Vehkaoja, A, Parak, J, Yli-Hankala, A & Korhonen, I 2018, The Accuracy of Atrial Fibrillation Detection from Wrist Photoplethysmography. A Study on Post-Operative Patients. julkaisussa *40th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, EMBC 2018*. Vuosikerta. 2018-July, 8513197, IEEE, Sivut 4844-4847, 18/07/18. <https://doi.org/10.1109/EMBC.2018.8513197>

Raitoharju, J, Riabchenko, E, Ahmad, I, Iosifidis, A, Gabbouj, M, Kiranyaz, S, Tirronen, V, Ärje, J, Kärkkäinen, S & Meissner, K 2018, 'Benchmark database for fine-grained image classification of benthic macroinvertebrates', *Image and Vision Computing*, Vuosikerta. 78, Sivut 73-83. <https://doi.org/10.1016/j.imavis.2018.06.005>

Ma, H, Yu, S, Gabbouj, M & Mueller, P 2018, 'Guest Editorial Special Issue on Multimedia Big Data in Internet of Things', *IEEE Internet of Things Journal*, Vuosikerta. 5, Nro 5, 8534720, Sivut 3405-3407. <https://doi.org/10.1109/JIOT.2018.2875580>

Multanen, J, Kultala, H, Jääskeläinen, P, Viitanen, T, Tervo, A & Takala, J 2018, LoTTA: Energy-Efficient Processor for Always-on Applications. julkaisussa *2018 IEEE International Workshop on Signal Processing Systems (SiPS)*. IEEE, 1/01/00. <https://doi.org/10.1109/SiPS.2018.8598408>

Acimovic, J, Teppola, H, Mäki-Marttunen, TM & Linne, M-L 2018, 'Data-driven study of synchronous population activity in generic spiking neuronal networks: How much do we capture using the minimal model for the considered phenomena?' Artikkelit esitetty, Helsinki, Suomi, 20/10/18 - 21/10/18, .

Lee, K, Riggan, BS & Bhattacharyya, SS 2018, A joint target localization and classification framework for sensor networks. julkaisussa *2018 IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2018 - Proceedings*. Vuosikerta. 2018-April, 8462641, Institute of Electrical and Electronics Engineers Inc., Sivut 3076-3080, Calgary, Kanada, 15/04/18. <https://doi.org/10.1109/ICASSP.2018.8462641>

Nikunen, J & Virtanen, T 2018, Estimation of time-varying room impulse responses of multiple sound sources from observed mixture and isolated source signals. julkaisussa *2018 IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2018 - Proceedings*. Vuosikerta. 2018-April, 8462535, Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing, Institute of Electrical and Electronics Engineers Inc., Sivut 421-425, Calgary, Kanada, 15/04/18. <https://doi.org/10.1109/ICASSP.2018.8462535>

Malik, J, Aytakin, C & Gabbouj, M 2018, Low-energy graph fourier basis functions span salient objects. julkaisussa *2018 IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2018 - Proceedings*. Vuosikerta. 2018-April, 8462672, Institute of Electrical and Electronics Engineers Inc., Sivut 1548-1552, Calgary, Kanada, 15/04/18. <https://doi.org/10.1109/ICASSP.2018.8462672>

Egiazarian, K, Ponomarenko, M, Lukin, V & Ieremeiev, O 2018, Statistical Evaluation of Visual Quality Metrics for Image Denoising. julkaisussa *2018 IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2018 - Proceedings*. Vuosikerta. 2018-April, 8462294, Institute of Electrical and Electronics Engineers Inc., Sivut 6752-6756, Calgary, Kanada, 15/04/18. <https://doi.org/10.1109/ICASSP.2018.8462294>

Schwarz, S, Hannuksela, MM, Fakour-Sevom, V & Sheikhi-Pour, N 2018, 2D Video Coding of Volumetric Video Data. julkaisussa *2018 Picture Coding Symposium, PCS 2018 - Proceedings*. IEEE, Sivut 61-65, San Francisco, Yhdysvallat, 24/06/18. <https://doi.org/10.1109/PCS.2018.8456265>

Solin, A, Cortes, S, Rahtu, E & Kannala, J 2018, Inertial Odometry on Handheld Smartphones. julkaisussa *2018 21st International Conference on Information Fusion, FUSION 2018.*, 8455482, IEEE, Sivut 1361-1368, Cambridge, Iso-Britannia, 10/07/18. <https://doi.org/10.23919/ICIF.2018.8455482>

Rastorgueva-Foi, E, Costa, M, Koivisto, M, Leppänen, K & Valkama, M 2018, User Positioning in mmW 5G Networks Using Beam-RSRP Measurements and Kalman Filtering. julkaisussa *2018 21st International Conference on Information Fusion, FUSION 2018.*, 8455289, IEEE, Sivut 1150-1156, 10/07/18. <https://doi.org/10.23919/ICIF.2018.8455289>

Eslahi, N & Foi, A 2018, Anisotropic Spatiotemporal Regularization in Compressive Video Recovery by Adaptively Modeling the Residual Errors as Correlated Noise. julkaisussa *2018 IEEE 13th Image, Video, and Multidimensional Signal Processing Workshop, IVMSP 2018 - Proceedings.*, 8448455, IEEE, Zagori, Kreikka, 10/06/18. <https://doi.org/10.1109/IVMSPW.2018.8448455>

Carabias-Orti, JJ, Cabanas-Molero, P, Vera-Candeas, P & Nikunen, J 2018, Multi-source localization using a DOA Kernel based spatial covariance model and complex nonnegative matrix factorization. julkaisussa *2018 IEEE 10th Sensor Array and Multichannel Signal Processing Workshop, SAM 2018.*, 8448664, Proceedings of the IEEE Sensor Array and Multichannel Signal Processing Workshop, IEEE, Sivut 440-444, Sheffield, Iso-Britannia, 8/07/18. <https://doi.org/10.1109/SAM.2018.8448664>

Zhang, H, Kiranyaz, S & Gabbouj, M 2018, Data Clustering Based on Community Structure in Mutual k-Nearest Neighbor Graph. julkaisussa *2018 41st International Conference on Telecommunications and Signal Processing, TSP 2018.*, 8441226, IEEE, Sivut 262-268, Athens, Kreikka, 4/07/18. <https://doi.org/10.1109/TSP.2018.8441226>

Khosravi, Z, Gerasimenko, M, Andreev, S & Koucheryavy, Y 2018, Performance Evaluation of UAV-Assisted mmWave Operation in Mobility-Enabled Urban Deployments. julkaisussa *2018 41st International Conference on Telecommunications and Signal Processing, TSP 2018.*, 8441321, IEEE, Sivut 150-153, Athens, Kreikka, 4/07/18. <https://doi.org/10.1109/TSP.2018.8441321>

Pihlajasalo, J, Leppäkoski, H, Ali-Löytty, S & Piché, R 2018, Improvement of GPS and BeiDou extended orbit predictions with CNNs. julkaisussa *26th European Navigation Conference, ENC 2018: Gothenburg, Sweden, 14-17 May, 2018.*, 8433244, IEEE, Sivut 54-59, 20/09/18. <https://doi.org/10.1109/EURONAV.2018.8433244>

Cruz, C, Foi, A, Katkovnik, V & Egiazarian, K 2018, 'Nonlocality-Reinforced Convolutional Neural Networks for Image Denoising', *IEEE Signal Processing Letters*, Vuosikerta. 25, Nro 8, Sivut 1216-1220. <https://doi.org/10.1109/LSP.2018.2850222>

Tejero-de-Pablos, A, Nakashima, Y, Sato, T, Yokoya, N, Linna, M & Rahtu, E 2018, 'Summarization of User-Generated Sports Video by Using Deep Action Recognition Features', *IEEE Transactions on Multimedia*, Vuosikerta. 20, Nro 8, Sivut 2000-2011. <https://doi.org/10.1109/TMM.2018.2794265>

Henno, J, Jaakkola, H & Makela, J 2018, Adjusting university education with workspace training and self-education. julkaisussa *2018 41st International Convention on Information and Communication Technology, Electronics and Microelectronics, MIPRO 2018.* IEEE, Sivut 701-708, International Convention on Information and Communication Technology, Electronics and Microelectronics, 1/01/00. <https://doi.org/10.23919/MIPRO.2018.8400131>

Jaakkola, H, Thalheim, B, Henno, J, Mäkelä, J & Keto, H 2018, Role of the user in information systems development. julkaisussa *2018 41st International Convention on Information and Communication Technology, Electronics and Microelectronics, MIPRO 2018.* IEEE, Sivut 625-632, International Convention on Information and Communication Technology, Electronics and Microelectronics, 1/01/00. <https://doi.org/10.23919/MIPRO.2018.8400118>

Riihonen, T, Korpi, D, Turunen, M & Valkama, M 2018, Full-duplex radio technology for simultaneously detecting and preventing improvised explosive device activation. julkaisussa *2018 International Conference on Military Communications and Information Systems, ICMCIS 2018.* IEEE, Sivut 1-4, Warsaw, Puola, 22/05/18. <https://doi.org/10.1109/ICMCIS.2018.8398707>

Phan, D & Rodrigues, SS 2018, 'Stabilization to trajectories for parabolic equations', *Mathematics of Control, Signals, and Systems*, Vuosikerta. 30, Nro 2, 11. <https://doi.org/10.1007/s00498-018-0218-0>

Daniel, O, Wymeersch, H & Nurmi, J 2018, 'Delay-Accuracy Trade-off in Opportunistic Time-of-Arrival Localization', *IEEE Signal Processing Letters*, Vuosikerta. 25, Nro 6, Sivut 763-767. <https://doi.org/10.1109/LSP.2018.2826470>

Abdelaziz, M, Anttila, L, Brihuega, A, Tufvesson, F & Valkama, M 2018, 'Digital Predistortion for Hybrid MIMO Transmitters', *IEEE Journal on Selected Topics in Signal Processing*, Vuosikerta. 12, Nro 3, Sivut 445-454. <https://doi.org/10.1109/JSTSP.2018.2824981>

Tran, DT, Waris, MA, Gabbouj, M & Iosifidis, A 2018, Sample-based regularization for support vector machine classification. julkaisussa *Proceedings of the 7th International Conference on Image Processing Theory, Tools and Applications, IPTA 2017*. IEEE, Sivut 1-6, Montreal, Kanada, 28/11/17. <https://doi.org/10.1109/IPTA.2017.8310103>

Schiopu, I, Gabbouj, M, Iosifidis, A, Zeng, B & Liu, S 2018, Subaperture image segmentation for lossless compression. julkaisussa *Proceedings of the 7th International Conference on Image Processing Theory, Tools and Applications, IPTA 2017*. IEEE, Sivut 1-6, Montreal, Kanada, 28/11/17. <https://doi.org/10.1109/IPTA.2017.8310083>

Krogerus, T, Hyvönen, M & Huhtala, K 2018, 'Analysis of common rail pressure signal of dual-fuel large industrial engine for identification of injection duration of pilot diesel injectors', *Fuel*, Vuosikerta. 216, Sivut 1-9. <https://doi.org/10.1016/j.fuel.2017.11.152>

Aytekin, C, Nikkanen, J & Gabbouj, M 2018, Deep multiresolution color constancy. julkaisussa *2017 IEEE International Conference on Image Processing, ICIP 2017 - Proceedings*. IEEE COMPUTER SOCIETY PRESS, Sivut 3735-3739, IEEE INTERNATIONAL CONFERENCE ON IMAGE PROCESSING, 1/01/00. <https://doi.org/10.1109/ICIP.2017.8296980>

Curcio, IDD, Toukoma, H & Naik, D 2018, 360-Degree video streaming and its subjective quality. julkaisussa *SMPTE 2017 Annual Technical Conference and Exhibition, SMPTE 2017*. SMPTE, Sivut 1-23, Los Angeles, Yhdysvallat, 23/10/17. <https://doi.org/10.5594/M001758>

Mesaros, A, Heittola, T, Benetos, E, Foster, P, Lagrange, M, Virtanen, T & Plumbley, MD 2018, 'Detection and Classification of Acoustic Scenes and Events: Outcome of the DCASE 2016 Challenge', *IEEE/ACM Transactions on Audio Speech and Language Processing*, Vuosikerta. 26, Nro 2, Sivut 379-393. <https://doi.org/10.1109/TASLP.2017.2778423>

Raitoharju, M, Svensson, L, Garcia-Fernandez, AF & Piche, R 2018, 'Damped Posterior Linearization Filter', *IEEE Signal Processing Letters*, Vuosikerta. 25, Nro 4. <https://doi.org/10.1109/LSP.2018.2806304>

Raeesi, O, Gokceoglu, A & Valkama, M 2018, 'Estimation and Mitigation of Channel Non-Reciprocity in Massive MIMO', *IEEE Transactions on Signal Processing*, Vuosikerta. 66, Nro 10. <https://doi.org/10.1109/TSP.2018.2814992>

Wu, J, Blattner, T, Keyrouz, W & Bhattacharyya, SS 2018, 'Model-Based Dynamic Scheduling for Multicore Signal Processing', *Journal of Signal Processing Systems*, Sivut 1-14. <https://doi.org/10.1007/s11265-018-1412-5>

Azzari, L, Borges, LR & Foi, A 2018, Modeling and estimation of signal-dependent and correlated noise. julkaisussa *Denosing of Photographic Images and Video: Fundamentals, Open Challenges and New Trends*. Advances in Computer Vision and Pattern Recognition, SPRINGER-VERLAG LONDON LTD, Sivut 1-36. https://doi.org/10.1007/978-3-319-96029-6_1

Yuan, J, Gao, K, Zhu, P & Egiazarian, K 2018, 'Multi-view predictive latent space learning', *Pattern Recognition Letters*. <https://doi.org/10.1016/j.patrec.2018.06.022>

Aytekin, C, Iosifidis, A & Gabbouj, M 2018, 'Probabilistic saliency estimation', *Pattern Recognition*, Vuosikerta. 74, Sivut 359-372. <https://doi.org/10.1016/j.patcog.2017.09.023>

Nikunen, J, Diment, A & Virtanen, T 2018, 'Separation of Moving Sound Sources Using Multichannel NMF and Acoustic Tracking', *IEEE/ACM Transactions on Audio Speech and Language Processing*, Vuosikerta. 26, Nro 2, Sivut 281-295. <https://doi.org/10.1109/TASLP.2017.2774925>

Thanh Tran, D, Gabbouj, M & Iosifidis, A 2017, 'Multilinear class-specific discriminant analysis', *Pattern Recognition Letters*, Vuosikerta. 100, Sivut 131-136. <https://doi.org/10.1016/j.patrec.2017.10.027>

Katkovnik, V, Ponomarenko, M & Egiazarian, K 2017, 'Sparse approximations in complex domain based on BM3D modeling', *Signal Processing*, Vuosikerta. 141, Sivut 96-108. <https://doi.org/10.1016/j.sigpro.2017.05.032>

Wu, J, Blattner, T, Keyrouz, W & Bhattacharyya, SS 2017, Model-based dynamic scheduling for multicore implementation of image processing systems. julkaisussa *2017 IEEE International Workshop on Signal Processing Systems, SiPS 2017.*, 8110003, IEEE, Lorient, Ranska, 3/10/17. <https://doi.org/10.1109/SiPS.2017.8110003>

Iosifidis, A, Tefas, A, Pitas, I & Gabbouj, M 2017, 'Big Media Data Analysis', *Signal Processing: Image Communication*, Vuosikerta. 59, Sivut 105-108. <https://doi.org/10.1016/j.image.2017.10.004>

Lee, K, Riggan, BS & Bhattacharyya, SS 2017, An optimized embedded target detection system using acoustic and seismic sensors. julkaisussa *25th European Signal Processing Conference, EUSIPCO 2017.* IEEE, Sivut 986-990, EUROPEAN SIGNAL PROCESSING CONFERENCE, 1/01/00. <https://doi.org/10.23919/EUSIPCO.2017.8081355>

Ito, I & Egiazarian, K 2017, Full search equivalent fast block matching using orthonormal tree-structured haar transform. julkaisussa *ISPA 2017 - 10th International Symposium on Image and Signal Processing and Analysis.* IEEE COMPUTER SOCIETY PRESS, Sivut 177-182, 1/01/00. <https://doi.org/10.1109/ISPA.2017.8073591>

Carrera, D, Boracchi, G, Foi, A & Wohlberg, B 2017, 'Sparse Overcomplete Denoising: Aggregation Versus Global Optimization', *IEEE Signal Processing Letters*, Vuosikerta. 24, Nro 10, Sivut 1468-1472. <https://doi.org/10.1109/LSP.2017.2734119>

Rusu, C & Astola, J 2017, Convergence analysis of error-reduction algorithm for solving of the extended one-dimensional discrete phase retrieval problem. julkaisussa *ISSCS 2017 - International Symposium on Signals, Circuits and Systems.* IEEE, INTERNATIONAL SYMPOSIUM ON SIGNALS, CIRCUITS & SYSTEMS, 1/01/00. <https://doi.org/10.1109/ISSCS.2017.8034945>

Astola, P & Tabus, I 2017, Lossless compression of high resolution disparity map images. julkaisussa *ISSCS 2017 - International Symposium on Signals, Circuits and Systems.* IEEE, INTERNATIONAL SYMPOSIUM ON SIGNALS, CIRCUITS & SYSTEMS, 1/01/00. <https://doi.org/10.1109/ISSCS.2017.8034934>

Drgas, S, Virtanen, T, Lücke, J & Hurmalainen, A 2017, 'Binary Non-Negative Matrix Deconvolution for Audio Dictionary Learning', *IEEE/ACM Transactions on Audio Speech and Language Processing*, Vuosikerta. 25, Nro 8, Sivut 1644-1656. <https://doi.org/10.1109/TASLP.2017.2709909>

Sheikh, MU & Lempiäinen, J 2017, Analysis of multipath propagation for 5G system at higher frequencies in microcellular environment. julkaisussa *2017 13th International Wireless Communications and Mobile Computing Conference, IWCMC 2017.* IEEE, Sivut 1660-1664, 1/01/00. <https://doi.org/10.1109/IWCMC.2017.7986533>

Sheikh, MU, Hiltunen, K & Lempiäinen, J 2017, Angular wall loss model and Extended Building Penetration model for outdoor to indoor propagation. julkaisussa *2017 13th International Wireless Communications and Mobile Computing Conference, IWCMC 2017.* IEEE, Sivut 1291-1296, 1/01/00. <https://doi.org/10.1109/IWCMC.2017.7986471>

- Zhang, H, Kiranyaz, S & Gabbouj, M 2017, A k-nearest neighbor multilabel ranking algorithm with application to content-based image retrieval. julkaisussa *2017 IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2017 - Proceedings*. IEEE, Sivut 2587-2591, IEEE INTERNATIONAL CONFERENCE ON ACOUSTICS, SPEECH AND SIGNAL PROCESSING, 1/01/00. <https://doi.org/10.1109/ICASSP.2017.7952624>
- Lee, K, Riggan, BS & Bhattacharyya, SS 2017, An accumulative fusion architecture for discriminating people and vehicles using acoustic and seismic signals. julkaisussa *2017 IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2017 - Proceedings*. IEEE, Sivut 2976-2980, IEEE INTERNATIONAL CONFERENCE ON ACOUSTICS, SPEECH AND SIGNAL PROCESSING, 1/01/00. <https://doi.org/10.1109/ICASSP.2017.7952702>
- Korpi, D, Riihonen, T & Valkama, M 2017, Inband full-duplex radio access system with self-backhauling: Transmit power minimization under QoS requirements. julkaisussa *2017 IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2017 - Proceedings*. IEEE, Sivut 6558-6562, IEEE INTERNATIONAL CONFERENCE ON ACOUSTICS, SPEECH AND SIGNAL PROCESSING, 1/01/00. <https://doi.org/10.1109/ICASSP.2017.7953420>
- Abdelaziz, M, Anttila, L & Valkama, M 2017, Reduced-complexity digital predistortion for massive MIMO. julkaisussa *2017 IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2017 - Proceedings*. IEEE, Sivut 6478-6482, IEEE INTERNATIONAL CONFERENCE ON ACOUSTICS, SPEECH AND SIGNAL PROCESSING, 1/01/00. <https://doi.org/10.1109/ICASSP.2017.7953404>
- Ellervee, P & Nurmi, J 2017, 'Guest Editorial: Implementation Issues in System-on-Chip', *Journal of Signal Processing Systems*, Vuosikerta. 87, Nro 3, Sivut 269-270. <https://doi.org/10.1007/s11265-017-1242-x>
- Richard, G, Virtanen, T, Bello, JP, Ono, N & Glotin, H 2017, 'Introduction to the Special Section on Sound Scene and Event Analysis', *IEEE/ACM Transactions on Audio Speech and Language Processing*, Vuosikerta. 25, Nro 6, Sivut 1169-1171. <https://doi.org/10.1109/TASLP.2017.2699334>
- Hussain, W, Hoffmann, H, Ahonen, T & Nurmi, J 2017, 'Power Mitigation by Performance Equalization in a Heterogeneous Reconfigurable Multicore Architecture', *Journal of Signal Processing Systems*, Vuosikerta. 87, Nro 3, Sivut 287-297. <https://doi.org/10.1007/s11265-016-1142-5>
- Dos Santos, RS, Taylor, J, Davies, M, Mavrogianni, A & Milner, J 2017, The variation of air and surface temperatures in London within a 1km grid using vehicle-transect and ASTER data. julkaisussa *2017 Joint Urban Remote Sensing Event, JURSE 2017.*, 7924613, 2017 Joint Urban Remote Sensing Event, JURSE 2017, Institute of Electrical and Electronics Engineers Inc., Dubai, Yhdistyneet arabiemirikunnat, 6/03/17. <https://doi.org/10.1109/JURSE.2017.7924613>
- Kara, PA, Kovacs, PT, Vagharshakyan, S, Martini, MG, Barsi, A, Balogh, T, Chuchvara, A & Chehaibi, A 2017, The Effect of Light Field Reconstruction and Angular Resolution Reduction on the Quality of Experience. julkaisussa *2016 12th International Conference on Signal-Image Technology & Internet-Based Systems (SITIS)*. IEEE, Sivut 781-786, INTERNATIONAL CONFERENCE ON SIGNAL-IMAGE TECHNOLOGY AND INTERNET-BASED SYSTEMS, 1/01/00. <https://doi.org/10.1109/SITIS.2016.128>
- Sapio, AE, Wolf, M & Bhattacharyya, SS 2017, Compact modeling and management of reconfiguration in digital channelizer implementation. julkaisussa *2016 IEEE Global Conference on Signal and Information Processing, GlobalSIP 2016 - Proceedings*. IEEE, Sivut 595-599, IEEE GLOBAL CONFERENCE ON SIGNAL AND INFORMATION PROCESSING, 1/01/00. <https://doi.org/10.1109/GlobalSIP.2016.7905911>
- Zare, A, Sreedhar, KK, Vadakital, VKM, Aminlou, A, Hannuksela, MM & Gabbouj, M 2017, HEVC-compliant viewport-adaptive streaming of stereoscopic panoramic video. julkaisussa *2016 Picture Coding Symposium, PCS 2016*. IEEE, Picture Coding Symposium, 1/01/00. <https://doi.org/10.1109/PCS.2016.7906401>
- Katkovnik, V & Egiazarian, K 2017, 'Sparse phase imaging based on complex domain nonlocal BM3D techniques', *Digital Signal Processing*, Vuosikerta. 63, Sivut 72-85. <https://doi.org/10.1016/j.dsp.2017.01.002>

- Korpi, D, Aghababaeetafreshi, M, Piilila, M, Anttila, L & Valkama, M 2017, Advanced architectures for self-interference cancellation in full-duplex radios: Algorithms and measurements. julkaisussa *2016 50th Asilomar Conference on Signals, Systems and Computers*. IEEE, Sivut 1553-1557, ASILOMAR CONFERENCE ON SIGNALS, SYSTEMS AND COMPUTERS, 1/01/00. <https://doi.org/10.1109/ACSSC.2016.7869639>
- González-Díaz, I, Birinci, M, Díaz-De-María, F & Delp, EJ 2017, 'Neighborhood Matching for Image Retrieval', *IEEE Transactions on Multimedia*, Vuosikerta. 19, Nro 3, Sivut 544-558. <https://doi.org/10.1109/TMM.2016.2616298>
- Li, L, Fanni, T, Viitanen, T, Xie, R, Palumbo, F, Raffo, L, Huttunen, H, Takala, J & Bhattacharyya, SS 2017, Low power design methodology for signal processing systems using lightweight dataflow techniques. julkaisussa *DASIP 2016 - Proceedings of the 2016 Conference on Design and Architectures for Signal and Image Processing*. IEEE COMPUTER SOCIETY PRESS, Sivut 82-89, CONFERENCE ON DESIGN AND ARCHITECTURES FOR SIGNAL AND IMAGE PROCESSING, 1/01/00. <https://doi.org/10.1109/DASIP.2016.7853801>
- Murayama, M, Oguro, D, Kikuchi, H, Huttunen, H, Ho, YS & Shin, J 2017, Color-distribution similarity by information theoretic divergence for color images. julkaisussa *2016 Asia-Pacific Signal and Information Processing Association Annual Summit and Conference, APSIPA 2016*. IEEE, ASIA-PACIFIC SIGNAL AND INFORMATION PROCESSING ASSOCIATION ANNUAL SUMMIT AND CONFERENCE, 1/01/00. <https://doi.org/10.1109/APSIPA.2016.7820681>
- Rui, R, Ardeshiri, T, Nurminen, H, Bazanella, A & Gustafsson, F 2017, 'State Estimation for a Class of Piecewise Affine State-Space Models', *IEEE Signal Processing Letters*, Vuosikerta. 24, Nro 1, Sivut 61-65. <https://doi.org/10.1109/LSP.2016.2633624>
- Blattner, T, Keyrouz, W, Bhattacharyya, SS, Halem, M & Brady, M 2017, 'A Hybrid Task Graph Scheduler for High Performance Image Processing Workflows', *Journal of Signal Processing Systems*, Vuosikerta. 89, Nro 3, Sivut 457-467. <https://doi.org/10.1007/s11265-017-1262-6>
- Barford, L, Bhattacharyya, SS & Liu, Y 2017, 'Data Flow Algorithms for Processors with Vector Extensions: Handling Actors With Internal State', *Journal of Signal Processing Systems*, Vuosikerta. 87, Nro 1, Sivut 21-31. <https://doi.org/10.1007/s11265-015-1045-x>
- Komar, MS 2017, 'Data Rate Assessment on L2-L3 CPU Bus and Bus between CPU and RAM in Modern CPUs', *Automatic Control and Computer Sciences*, Vuosikerta. 51, Nro 7, Sivut 701-708. <https://doi.org/10.3103/S014641161707029X>
- Boutellier, J & Nyländen, T 2017, 'Design Flow for GPU and Multicore Execution of Dynamic Dataflow Programs', *Journal of Signal Processing Systems*, Vuosikerta. 89, Nro 3, Sivut 469-478. <https://doi.org/10.1007/s11265-017-1260-8>
- Kim, SC & Bhattacharyya, SS 2017, 'Implementation of a Multirate Resampler for Multi-carrier Systems on GPUs', *Journal of Signal Processing Systems*, Vuosikerta. 89, Nro 3, Sivut 445-455. <https://doi.org/10.1007/s11265-017-1239-5>
- Helin, P, Astola, P, Rao, B & Tabus, I 2017, 'Minimum description length sparse modeling and region merging for lossless plenoptic image compression', *IEEE Journal on Selected Topics in Signal Processing*, Vuosikerta. 11, Nro 7. <https://doi.org/10.1109/JSTSP.2017.2737967>
- Rusu, C & Astola, J 2017, 'On the existence of the solution for one-dimensional discrete phase retrieval problem', *Signal, Image and Video Processing*, Vuosikerta. 11, Nro 2, Sivut 195-202. <https://doi.org/10.1007/s11760-016-0919-0>
- Li, K, Ghazi, A, Tarver, C, Boutellier, J, Abdelaziz, M, Anttila, L, Juntti, M, Valkama, M & Cavallaro, JR 2017, 'Parallel Digital Predistortion Design on Mobile GPU and Embedded Multicore CPU for Mobile Transmitters', *Journal of Signal Processing Systems*, Vuosikerta. 89, Nro 3, Sivut 417-430. <https://doi.org/10.1007/s11265-017-1233-y>
- Pelcat, M, Desnos, K, Maggiani, L, Liu, Y, Heulot, J, Nezan, JF & Bhattacharyya, SS 2016, Models of architecture: Reproducible efficiency evaluation for signal processing systems. julkaisussa *IEEE International Workshop on Signal Processing Systems, SiPS 2016*, 7780083, IEEE International Workshop on Signal Processing Systems, IEEE, Sivut 121-126, 1/01/00. <https://doi.org/10.1109/SiPS.2016.29>

- Ben Salem, H, Damarla, T, Sudusinghe, K, Stechele, W & Bhattacharyya, SS 2016, 'Adaptive tracking of people and vehicles using mobile platforms', *Eurasip Journal on Advances in Signal Processing*, Vuosikerta. 2016, Nro 1, 65. <https://doi.org/10.1186/s13634-016-0356-9>
- Barker, T & Virtanen, T 2016, 'Blind Separation of Audio Mixtures Through Nonnegative Tensor Factorization of Modulation Spectrograms', *IEEE-Acm transactions on audio speech and language processing*, Vuosikerta. 24, Nro 12, Sivut 2377-2389. <https://doi.org/10.1109/TASLP.2016.2602546>
- Pearson, RK, Neuvo, Y, Astola, J & Gabbouj, M 2016, 'Generalized Hampel Filters', *Eurasip Journal on Advances in Signal Processing*, Vuosikerta. 2016, Nro 1, 87. <https://doi.org/10.1186/s13634-016-0383-6>
- Nanni, L, Lumini, A, dos Santos, FLC, Paci, M & Hyttinen, J 2016, 'Ensembles of dense and dense sampling descriptors for the HEp-2 cells classification problem', *Pattern Recognition Letters*, Vuosikerta. 82, Sivut 28-35. <https://doi.org/10.1016/j.patrec.2016.01.026>
- Hirvola, O, Viitanen, T, Sintunata, V & Aoki, T 2016, Improved image quality in fast inpainting with omnidirectional filling. julkaisussa *International Conference on Image, Vision and Computing (ICIVC)*. IEEE, Sivut 31-35, 1/01/00. <https://doi.org/10.1109/ICIVC.2016.7571269>
- Rasku, J, Ojala, M, Pölönen, RP, Joutsijoki, H, Gizatdinova, Y, Laurikkala, J, Kartasalo, K, Aalto-Setälä, K & Juhola, M 2016, 'A software tool for studying the size and shape of human cardiomyocytes', *Biomedical Signal Processing and Control*, Vuosikerta. 30, Sivut 134-139. <https://doi.org/10.1016/j.bspc.2016.06.011>
- Zhu, S, Zeng, B, Zeng, L & Gabbouj, M 2016, 'Image interpolation based on non-local geometric similarities and directional gradients', *IEEE Transactions on Multimedia*, Vuosikerta. 18, Nro 9, Sivut 1707-1719. <https://doi.org/10.1109/TMM.2016.2593039>
- Iosifidis, A & Gabbouj, M 2016, 'Nyström-based approximate kernel subspace learning', *Pattern Recognition*, Sivut 190-197. <https://doi.org/10.1016/j.patcog.2016.03.018>
- Tanskanen, JMA, Kapucu, FE, Vätkki, I & Hyttinen, JAK 2016, Automatic objective thresholding to detect neuronal action potentials. julkaisussa *Proceedings of 2016 24th European Signal Processing Conference (EUSIPCO)*. Sivut 662-666, EUROPEAN SIGNAL PROCESSING CONFERENCE, 1/01/00. <https://doi.org/10.1109/EUSIPCO.2016.7760331>
- Razavi, A, Valkama, M & Cabric, D 2016, 'Compressive Detection of Random Subspace Signals', *IEEE Transactions on Signal Processing*, Vuosikerta. 64, Nro 16, Sivut 4166-4179. <https://doi.org/10.1109/TSP.2016.2560132>
- Azzari, L & Foi, A 2016, 'Variance Stabilization for Noisy+Estimate Combination in Iterative Poisson Denoising', *IEEE Signal Processing Letters*, Vuosikerta. 23, Nro 8, Sivut 1086-1090. <https://doi.org/10.1109/LSP.2016.2580600>
- Yli-Kaakinen, J & Renfors, M 2016, 'Optimization of Flexible Filter Banks Based on Fast Convolution', *Journal of Signal Processing Systems*, Vuosikerta. 85, Nro 1, Sivut 101-111. <https://doi.org/10.1007/s11265-015-1004-6>
- Mehta, R & Egiazarian, K 2016, 'Rotation Invariant Texture Description Using Symmetric Dense Microblock Difference', *IEEE Signal Processing Letters*, Vuosikerta. 23, Nro 6, Sivut 833-837. <https://doi.org/10.1109/LSP.2016.2561311>
- Patrona, F, Iosifidis, A, Tefas, A, Nikolaidis, N & Pitas, I 2016, 'Visual Voice Activity Detection in the Wild', *IEEE Transactions on Multimedia*, Vuosikerta. 18, Nro 6, Sivut 967-977. <https://doi.org/10.1109/TMM.2016.2535357>
- Daniel, O, Raasakka, J, Peltola, P, Fröhle, M, Rivero-Rodriguez, A, Wymeersch, H & Nurmi, J 2016, Blind sub-Nyquist GNSS signal detection. julkaisussa *2016 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)*. IEEE, Sivut 6575-6579, IEEE INTERNATIONAL CONFERENCE ON ACOUSTICS, SPEECH AND SIGNAL PROCESSING, 1/01/00. <https://doi.org/10.1109/ICASSP.2016.7472944>

Sarbu, S 2016, On Renyi's entropy estimation with one-dimensional Gaussian kernels. julkaisussa *2016 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)* . IEEE, Sivut 4408-4412, IEEE INTERNATIONAL CONFERENCE ON ACOUSTICS, SPEECH AND SIGNAL PROCESSING, 1/01/00. <https://doi.org/10.1109/ICASSP.2016.7472510>

Iosifidis, A & Gabbouj, M 2016, Supervised subspace learning based on deep randomized networks. julkaisussa *2016 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)* . The Institute of Electrical and Electronics Engineers, Inc., Sivut 2584-2588, IEEE INTERNATIONAL CONFERENCE ON ACOUSTICS, SPEECH AND SIGNAL PROCESSING, 1/01/00. <https://doi.org/10.1109/ICASSP.2016.7472144>

Kim, SC & Bhattacharyya, SS 2016, 'A Wideband Front-End Receiver Implementation on GPUs', *IEEE Transactions on Signal Processing*, Vuosikerta. 64, Nro 10, Sivut 2602-2612. <https://doi.org/10.1109/TSP.2016.2535349>

Mäkitalo, N, Aaltonen, T & Mikkonen, T 2016, Coordinating proactive social devices in a mobile cloud: Lessons learned and a way forward. julkaisussa *MOBILESoft '16 Proceedings of the International Conference on Mobile Software Engineering and Systems* . ACM, Sivut 179-188, 1/01/00. <https://doi.org/10.1145/2897073.2897079>

Lehtomäki, JJ, Bicen, AO & Akyildiz, IF 2016, 'Statistical analysis of interference for nanoscale electromechanical wireless communication at VHF-band', *IEEE Transactions on Signal Processing*, Vuosikerta. 64, Nro 8, Sivut 2040-2050. <https://doi.org/10.1109/TSP.2015.2512526>

Rubel, O, Lukin, V & Egiazarian, K 2016, On prediction of DCT-based denoising efficiency under spatially correlated noise conditions. julkaisussa *2016 13th International Conference on Modern Problems of Radio Engineering, Telecommunications and Computer Science (TCSET)* . IEEE, Sivut 750-754, 1/01/00. <https://doi.org/10.1109/TCSET.2016.7452171>

Park, Y, Alam, MH, Ryu, WJ & Lee, S 2016, BL-LDA: Bringing bigram to supervised topic model. julkaisussa *Proceedings - 2015 International Conference on Computational Science and Computational Intelligence, CSCI 2015.*, 7424068, Institute of Electrical and Electronics Engineers Inc., Sivut 83-88, Las Vegas, Yhdysvallat, 7/12/15. <https://doi.org/10.1109/CSCI.2015.146>

Vaz, P, Pereira, T, Figueiras, E, Correia, C, Humeau-Heurtier, A & Cardoso, J 2016, 'Which wavelength is the best for arterial pulse waveform extraction using laser speckle imaging?', *Biomedical Signal Processing and Control*, Vuosikerta. 25, Sivut 188-195. <https://doi.org/10.1016/j.bspc.2015.11.013>

Allen, M, Marttila, J, Valkama, M, Singh, S, Epp, M & Schlecker, W 2016, Digital full-band linearization of wideband direct-conversion receiver for radar and communications applications. julkaisussa *2015 49th Asilomar Conference on Signals, Systems and Computers* . IEEE COMPUTER SOCIETY PRESS, Sivut 1361-1368, ASILOMAR CONFERENCE ON SIGNALS, SYSTEMS AND COMPUTERS, 1/01/00. <https://doi.org/10.1109/ACSSC.2015.7421365>

Habib, M, Rasheed, S, Hussain, A & Ali, M 2016, Random Value Impulse Noise Removal Based on Most Similar Neighbors. julkaisussa *2015 13th International Conference on Frontiers of Information Technology (FIT)* . IEEE, Sivut 329-333, 1/01/00. <https://doi.org/10.1109/FIT.2015.64>

Balandina, E, Balandin, S, Koucheryavy, Y & Mouromtsev, D 2016, Innovative e-Tourism Services on Top of Geo2Tag LBS Platform. julkaisussa *Proceedings - 11th International Conference on Signal-Image Technology and Internet-Based Systems, SITIS 2015*. IEEE, Sivut 752-759, INTERNATIONAL CONFERENCE ON SIGNAL-IMAGE TECHNOLOGY AND INTERNET-BASED SYSTEMS, 1/01/00. <https://doi.org/10.1109/SITIS.2015.11>

Balasubramaniam, S, Jornet, JM, Pierobon, M & Koucheryavy, Y 2016, 'Guest editorial special issue on the internet of nano things', *IEEE Internet of Things Journal*, Vuosikerta. 3, Nro 1, Sivut 1-3. <https://doi.org/10.1109/JIOT.2016.2516838>

Mahlamäki, K, Niemi, A, Jokinen, J & Borgman, J 2016, 'Importance of maintenance data quality in extended warranty simulation', *International Journal of COMADEM*, Vuosikerta. 19, Nro 1, Sivut 3-10.

Davidson, P, Raunio, JP & Piché, R 2016, Accurate depth estimation from a sequence of monocular images supported by proprioceptive sensors. julkaisussa *23rd Saint Petersburg International Conference on Integrated Navigation Systems, ICINS 2016 - Proceedings*. State Research Center of the Russian Federation, Sivut 249-257, SAINT PETERSBURG INTERNATIONAL CONFERENCE ON INTEGRATED NAVIGATION SYSTEMS, 1/01/00.

Davidson, P & Merkulova, I 2016, Computer vision aided navigation systems. julkaisussa *23rd Saint Petersburg International Conference on Integrated Navigation Systems, ICINS 2016 - Proceedings*. State Research Center of the Russian Federation, Sivut 560-562, SAINT PETERSBURG INTERNATIONAL CONFERENCE ON INTEGRATED NAVIGATION SYSTEMS, 1/01/00.

Mehta, R & Egiazarian, K 2016, 'Dominant Rotated Local Binary Patterns (DRLBP) for texture classification', *Pattern Recognition Letters*, Vuosikerta. 71, Sivut 16-22. <https://doi.org/10.1016/j.patrec.2015.11.019>

Rubel, O, Lukin, V, Abramov, S, Vozel, B, Egiazarian, K & Pogrebnyak, O 2016, 'Efficiency of texture image filtering and its prediction', *Signal, Image and Video Processing*, Vuosikerta. 10, Nro 8, Sivut 1543–1550. <https://doi.org/10.1007/s11760-016-0969-3>

Aghababaeetafreshi, M, Lehtonen, LK, Levanen, T, Valkama, M & Takala, J 2016, 'IEEE 802.11ac MIMO Transceiver Baseband Processing on a VLIW Processor', *Journal of Signal Processing Systems*. <https://doi.org/10.1007/s11265-015-1032-2>

Chukhman, I, Jiao, Y, Salem, HB & Bhattacharyya, SS 2016, 'Instrumentation-Driven Validation of Dataflow Applications', *Journal of Signal Processing Systems*, Vuosikerta. 84, Nro 3, Sivut 383–397. <https://doi.org/10.1007/s11265-015-1073-6>

Piché, R 2016, 'Online tests of Kalman filter consistency', *International Journal of Adaptive Control and Signal Processing*, Vuosikerta. 30, Nro 1, Sivut 115–124. <https://doi.org/10.1002/acs.2571>

Multanen, J, Kultala, H, Koskela, M, Viitanen, T, Jääskeläinen, P, Takala, J, Danielyan, A & Cruz, C 2016, OpenCL Programmable Exposed Datapath High Performance Low-Power Image Signal Processor. julkaisussa *2016 IEEE Nordic Circuits and Systems Conference (NORCAS)*. IEEE, 1/01/00. <https://doi.org/10.1109/NORCHIP.2016.7792906>

Zemliachenko, A, Lukin, V, Ponomarenko, N, Egiazarian, K & Astola, J 2016, 'Still image/video frame lossy compression providing a desired visual quality', *Multidimensional Systems and Signal Processing*, Vuosikerta. 27, Nro 3, Sivut 697-718. <https://doi.org/10.1007/s11045-015-0333-8>

Borges, L, Vieira, M & Foi, A 2016, 'Unbiased Injection of Signal-Dependent Noise in Variance-Stabilized Range', *IEEE Signal Processing Letters*, Vuosikerta. 23, Nro 10, Sivut 1494-1498. <https://doi.org/10.1109/LSP.2016.2601689>

Sarjanoja, S, Boutellier, J & Hannuksela, J 2015, BM3D image denoising using heterogeneous computing platforms. julkaisussa *DASIP 2015 - Proceedings of the 2015 Conference on Design and Architectures for Signal and Image Processing*. Vuosikerta. 2015-December, 7367257, IEEE COMPUTER SOCIETY PRESS, Cracow, Puola, 23/09/15. <https://doi.org/10.1109/DASIP.2015.7367257>

Larjo, A & Lähdesmäki, H 2015, 'Using multi-step proposal distribution for improved MCMC convergence in Bayesian network structure learning', *Eurasip Journal on Bioinformatics and Systems Biology*, Vuosikerta. 2015, Nro 1, 6. <https://doi.org/10.1186/s13637-015-0024-7>

Dai, C-Q, Li, F-J & Renfors, M 2015, 'Energy cooperation for throughput optimization based on save-then-transmit protocol in wireless communication system', *Eurasip Journal on Wireless Communications and Networking*, Vuosikerta. 2015, Nro 1, 119. <https://doi.org/10.1186/s13638-015-0364-8>

Riabchenko, E & Kämäräinen, J-K 2015, 'Generative part-based Gabor object detector', *Pattern Recognition Letters*, Vuosikerta. 68, Nro P1, Sivut 1-8. <https://doi.org/10.1016/j.patrec.2015.08.004>

- Acimovic, J, Mäki-Marttunen, TM & Linne, M-L 2015, Whole-cell morphological properties of neurons constrain the nonrandom features of network connectivity. julkaisussa G Cymbalyuk & A Burkitt (toim), *24th Annual Computational Neuroscience Meeting: CNS*2015*. Vuosikerta. 16 (Suppl 1), O7, BioMed Central, Prague, Sivut P:O7, Prague, Tshikki, 18/07/15.
- Raitoharju, M, Ali-Löytty, S & Piché, R 2015, 'Binomial Gaussian mixture filter', *Eurasip Journal on Advances in Signal Processing*, Vuosikerta. 2015, Nro 1, 36. <https://doi.org/10.1186/s13634-015-0221-2>
- Boutellier, J & Nyländén, T 2015, Programming graphics processing units in the RVC-CAL dataflow language. julkaisussa *Electronic Proceedings of the 2015 IEEE International Workshop on Signal Processing Systems, SiPS 2015*. Vuosikerta. 2015-December, 7344994, Institute of Electrical and Electronics Engineers Inc., Hangzhou, Kiina, 14/10/15. <https://doi.org/10.1109/SiPS.2015.7344994>
- Martino, L, Yang, H, Luengo, D, Kanninen, J & Corander, J 2015, 'A fast universal self-tuned sampler within Gibbs sampling', *Digital Signal Processing*, Vuosikerta. 47, Sivut 68-83. <https://doi.org/10.1016/j.dsp.2015.04.005>
- Raitoharju, M, Nurminen, H & Piché, R 2015, 'Kalman filter with a linear state model for PDR+WLAN positioning and its application to assisting a particle filter', *Eurasip Journal on Advances in Signal Processing*, Vuosikerta. 2015, Nro 1, 33. <https://doi.org/10.1186/s13634-015-0216-z>
- Diaz, I, Wilhelmsson, LR, Sofotasios, PC, Miao, Y, Tan, S, Edfors, O & Öwall, V 2015, 'A New Approach to Sign-Bit-Based Parameter Estimation in OFDM Receivers', *Circuits, Systems and Signal Processing*, Vuosikerta. 34, Nro 11, Sivut 3631-3660. <https://doi.org/10.1007/s00034-015-0025-5>
- Irofti, P & Dumitrescu, B 2015, Cosparsity dictionary learning for the orthogonal case. julkaisussa *2015 19th International Conference on System Theory, Control and Computing, ICSTCC 2015 - Joint Conference SINTES 19, SACCS 15, SIMSIS 19*. IEEE, Sivut 343-347, International conference on system theory, control and computing, 1/01/14. <https://doi.org/10.1109/ICSTCC.2015.7321317>
- Baby, D, Virtanen, T, Gemmeke, JF & Van hamme, H 2015, 'Coupled dictionaries for exemplar-based speech enhancement and automatic speech recognition', *IEEE-Acm transactions on audio speech and language processing*, Vuosikerta. 23, Nro 11, Sivut 1788-1799. <https://doi.org/10.1109/TASLP.2015.2450491>
- Sofotasios, PC, Muhaidat, S, Valkama, M, Ghogho, M & Karagiannidis, GK 2015, 'Entropy and Channel Capacity under Optimum Power and Rate Adaptation over Generalized Fading Conditions', *IEEE Signal Processing Letters*, Vuosikerta. 22, Nro 11, Sivut 2162-2166. <https://doi.org/10.1109/LSP.2015.2464221>
- Nurminen, H, Ardeshiri, T, Piché, R & Gustafsson, F 2015, 'Robust Inference for State-Space Models with Skewed Measurement Noise', *IEEE Signal Processing Letters*, Vuosikerta. 22, Nro 11, Sivut 1898-1902. <https://doi.org/10.1109/LSP.2015.2437456>
- Iosifidis, A, Tefas, A & Pitas, I 2015, 'Sparse extreme learning machine classifier exploiting intrinsic graphs', *Pattern Recognition Letters*, Vuosikerta. 65, Sivut 192-196. <https://doi.org/10.1016/j.patrec.2015.07.036>
- Huttunen, H & Tohka, J 2015, 'Model selection for linear classifiers using Bayesian error estimation', *Pattern Recognition*, Vuosikerta. 48, Nro 11, Sivut 3739-3748. <https://doi.org/10.1016/j.patcog.2015.05.005>
- Sikiö, M, Holli-Helenius, KK, Ryymin, P, Dastidar, P, Eskola, H & Harrison, L 2015, The effect of region of interest size on textural parameters. julkaisussa *2015 9th International Symposium on Image and Signal Processing and Analysis (ISPA)*. IEEE, Sivut 149-153, Kroatia, 1/01/15. <https://doi.org/10.1109/ISPA.2015.7306049>
- Sofotasios, PC, Muhaidat, S, Karagiannidis, GK & Sharif, BS 2015, 'Solutions to integrals involving the marcum Q-function and applications', *IEEE Signal Processing Letters*, Vuosikerta. 22, Nro 10, Sivut 1752-1756. <https://doi.org/10.1109/LSP.2015.2432064>

- Akar, GB & Gotchev, A 2015, MOBILE3DTV: Content delivery optimization over DVB-H system. julkaisussa *SMPTE International Conference on Stereoscopic 3D for Media and Entertainment*. SMPTE, New York, Yhdysvallat, 13/07/10. <https://doi.org/10.5594/M001417>
- Rusu, C & Astola, J 2015, The extended one-dimensional discrete phase retrieval problem. julkaisussa *2015 International Symposium on Signals, Circuits and Systems (ISSCS)*. IEEE, Yhdysvallat, 1/01/00. <https://doi.org/10.1109/ISSCS.2015.7204029>
- Azzari, L & Foi, A 2015, Collaborative filtering based on group coordinates for smoothing and directional sharpening. julkaisussa *ICASSP, IEEE International Conference on Acoustics, Speech and Signal Processing - Proceedings*. IEEE, Sivut 1573-1577, IEEE INTERNATIONAL CONFERENCE ON ACOUSTICS, SPEECH AND SIGNAL PROCESSING, 1/01/00. <https://doi.org/10.1109/ICASSP.2015.7178235>
- Iosifidis, A, Tefas, A & Pitas, I 2015, Enhancing class discrimination in Kernel Discriminant Analysis. julkaisussa *ICASSP, IEEE International Conference on Acoustics, Speech and Signal Processing - Proceedings.*, 7178306, The Institute of Electrical and Electronics Engineers, Inc., Sivut 1926-1930, Brisbane, Australia, 19/04/14. <https://doi.org/10.1109/ICASSP.2015.7178306>
- Baby, D, Gemmeke, JF, Virtanen, T & Van Hamme, H 2015, Exemplar-based speech enhancement for deep neural network based automatic speech recognition. julkaisussa *ICASSP, IEEE International Conference on Acoustics, Speech and Signal Processing - Proceedings*. The Institute of Electrical and Electronics Engineers, Inc., Sivut 4485-4489, IEEE INTERNATIONAL CONFERENCE ON ACOUSTICS, SPEECH AND SIGNAL PROCESSING, 1/01/00. <https://doi.org/10.1109/ICASSP.2015.7178819>
- Mygdalis, V, Iosifidis, A, Tefas, A & Pitas, I 2015, Exploiting subclass information in one-class support vector machine for video summarization. julkaisussa *ICASSP, IEEE International Conference on Acoustics, Speech and Signal Processing - Proceedings*. Vuosikerta. 2015-August, The Institute of Electrical and Electronics Engineers, Inc., Sivut 2259-2263, Brisbane, Australia, 19/04/14. <https://doi.org/10.1109/ICASSP.2015.7178373>
- Dumitrescu, B, Rusu, C, Tabus, I & Astola, J 2015, Low-complexity robust DOA estimation. julkaisussa *ICASSP, IEEE International Conference on Acoustics, Speech and Signal Processing - Proceedings*. The Institute of Electrical and Electronics Engineers, Inc., Sivut 2794-2798, IEEE INTERNATIONAL CONFERENCE ON ACOUSTICS, SPEECH AND SIGNAL PROCESSING, 1/01/00. <https://doi.org/10.1109/ICASSP.2015.7178480>
- Barker, T, Virtanen, T & Pontoppidan, NH 2015, Low-Latency Sound-Source-Separation using Non-Negative Matrix Factorisation with Coupled Analysis and Synthesis Dictionaries. julkaisussa *2015 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)*. IEEE, Sivut 241-245, IEEE INTERNATIONAL CONFERENCE ON ACOUSTICS, SPEECH AND SIGNAL PROCESSING, 1/01/00. <https://doi.org/10.1109/ICASSP.2015.7177968>
- Hurmala, A, Saeidi, R & Virtanen, T 2015, Similarity induced group sparsity for non-negative matrix factorisation. julkaisussa *ICASSP, IEEE International Conference on Acoustics, Speech and Signal Processing - Proceedings*. The Institute of Electrical and Electronics Engineers, Inc., Sivut 4425-4429, IEEE INTERNATIONAL CONFERENCE ON ACOUSTICS, SPEECH AND SIGNAL PROCESSING, 1/01/00. <https://doi.org/10.1109/ICASSP.2015.7178807>
- Onose, A & Dumitrescu, B 2015, 'Adaptive Randomized Coordinate Descent for Sparse Systems: Lasso and Greedy Algorithms', *IEEE Transactions on Signal Processing*, Vuosikerta. 63, Nro 15, Sivut 4091-4101. <https://doi.org/10.1109/TSP.2015.2436369>
- Kimionis, J, Georgiadis, A, Isakov, M, Qi, HJ & Tentzeris, MM 2015, 3D/inkjet-printed origami antennas for multi-direction RF harvesting. julkaisussa *2015 IEEE MTT-S International Microwave Symposium, IMS 2015.*, 7166878, Institute of Electrical and Electronics Engineers Inc., Phoenix, Yhdysvallat, 17/05/15. <https://doi.org/10.1109/MWSYM.2015.7166878>
- Mariotti, C, Cook, BS, Alimenti, F, Roselli, L & Tentzeris, MM 2015, Additively manufactured multilayer high performance RF passive components on cellulose substrates for internet-of-things electronic circuits. julkaisussa *2015 IEEE MTT-S International Microwave Symposium, IMS 2015.*, 7166924, Institute of Electrical and Electronics Engineers Inc., Phoenix, Yhdysvallat, 17/05/15. <https://doi.org/10.1109/MWSYM.2015.7166924>

Kim, S, Bito, J, Jeong, S, Georgiadis, A & Tentzeris, MM 2015, A flexible hybrid printed RF energy harvester utilizing catalyst-based copper printing technologies for far-field RF energy harvesting applications. julkaisussa *2015 IEEE MTT-S International Microwave Symposium, IMS 2015.*, 7166723, Institute of Electrical and Electronics Engineers Inc., Phoenix, Yhdysvallat, 17/05/15. <https://doi.org/10.1109/MWSYM.2015.7166723>

Bito, J, Hester, JG & Tentzeris, MM 2015, Ambient energy harvesting from a two-way talk radio for flexible wearable devices utilizing inkjet printing masking. julkaisussa *2015 IEEE MTT-S International Microwave Symposium, IMS 2015.*, 7167079, Institute of Electrical and Electronics Engineers Inc., Phoenix, Yhdysvallat, 17/05/15. <https://doi.org/10.1109/MWSYM.2015.7167079>

Zhu, S, Zeng, B & Gabbouj, M 2015, 'Adaptive sampling for compressed sensing based image compression', *Journal of Visual Communication and Image Representation*, Vuosikerta. 30, Sivut 94-105. <https://doi.org/10.1016/j.jvcir.2015.03.006>

Schiopu, I & Tabus, I 2015, Lossy-to-lossless progressive coding of depth-maps. julkaisussa *International Symposium on Signals, Circuits and Systems (ISSCS)*. Iasi, Romania, Sivut 1 - 4, Yhdysvallat, 1/01/00. <https://doi.org/10.1109/ISSCS.2015.7203966>

Boutellier, J, Ersfolk, J, Lilius, J, Mattavelli, M, Roquier, G & Silvén, O 2015, 'Actor Merging for Dataflow Process Networks', *IEEE Transactions on Signal Processing*, Vuosikerta. 63, Nro 10, 7055878, Sivut 2496-2508. <https://doi.org/10.1109/TSP.2015.2411229>

Zaki, G, Plishker, W, Bhattacharyya, SS & Fruth, F 2015, Partial expansion of dataflow graphs for resource-aware scheduling of multicore signal processing systems. julkaisussa *Conference Record of the 48th Asilomar Conference on Signals, Systems and Computers*. Vuosikerta. 2015-April, 7094469, IEEE COMPUTER SOCIETY PRESS, Sivut 385-392, Pacific Grove, Yhdysvallat, 2/11/14. <https://doi.org/10.1109/ACSSC.2014.7094469>

Rebeiz, E, Hagh Ghadam, AS, Valkama, M & Cabric, D 2015, 'Spectrum Sensing under RF Non-Linearities: Performance Analysis and DSP-Enhanced Receivers', *IEEE Transactions on Signal Processing*, Vuosikerta. 63, Nro 8, Sivut 1950-1964. <https://doi.org/10.1109/TSP.2015.2401532>

Höynälänmaa, T 2015, 'Multiresolution analysis for compactly supported interpolating tensor product wavelets', *International Journal of Wavelets Multiresolution and Information Processing*, Vuosikerta. 13, Nro 2, 1550010. <https://doi.org/10.1142/S0219691315500101>

Iosifidis, A, Tefas, A & Pitas, I 2015, 'On the kernel Extreme Learning Machine classifier', *Pattern Recognition Letters*, Vuosikerta. 54, Sivut 11-17. <https://doi.org/10.1016/j.patrec.2014.12.003>

Hukkanen, J, Astola, P & Tabus, I 2015, Lossless compression of regions-of-interest from retinal images. julkaisussa *EUVIP 2014 - 5th European Workshop on Visual Information Processing*. The Institute of Electrical and Electronics Engineers, Inc., EUROPEAN WORKSHOP ON VISUAL INFORMATION PROCESSING, 1/01/00. <https://doi.org/10.1109/EUVIP.2014.7018394>

Joutsijoki, H, Rasku, J, Haponen, M, Baldin, I, Gizatdinova, Y, Paci, M, Saarikoski, J, Varpa, K, Siirtola, H, Ávalos-Salguero, J, Iltanen, K, Laurikkala, J, Penttinen, K, Hyttinen, J, Aalto-Setälä, K & Juhola, M 2015, Classification of iPSC colony images using hierarchical strategies with support vector machines. julkaisussa *IEEE SSCI 2014 - 2014 IEEE Symposium Series on Computational Intelligence - CIDM 2014: 2014 IEEE Symposium on Computational Intelligence and Data Mining, Proceedings.*, 7008152, The Institute of Electrical and Electronics Engineers, Inc., Sivut 86-92, IEEE SYMPOSIUM ON COMPUTATIONAL INTELLIGENCE AND DATA MINING, 1/01/00. <https://doi.org/10.1109/CIDM.2014.7008152>

Ponomarenko, N, Jin, L, Ieremeiev, O, Lukin, V, Egiazarian, K, Astola, J, Vozel, B, Chehdi, K, Carli, M, Battisti, F & Jay Kuo, CC 2015, 'Image database TID2013: Peculiarities, results and perspectives', *Signal Processing: Image Communication*, Vuosikerta. 30, Sivut 57-77. <https://doi.org/10.1016/j.image.2014.10.009>

Efimushkina, T, Gabbouj, M & Samuylov, K 2015, 'Analytical model in discrete time for cross-layer video communication over LTE', *Automatic Control and Computer Sciences*, Vuosikerta. 48, Nro 6, Sivut 345-357. <https://doi.org/10.3103/S0146411614060029>

Singh, S, Valkama, M, Epp, M, Anttila, L, Schlecker, W & Ingber, E 2015, 'Digital correction of frequency response mismatches in 2-channel time-interleaved ADCs using adaptive I/Q signal processing', *Analog Integrated Circuits and Signal Processing*, Vuosikerta. 82, Nro 3, Sivut 543-555. <https://doi.org/10.1007/s10470-014-0476-9>

Şimşekli, U, Virtanen, T & Cemgil, AT 2015, 'Non-negative tensor factorization models for Bayesian audio processing', *Digital Signal Processing*, Vuosikerta. 47, Sivut 178–191. <https://doi.org/10.1016/j.dsp.2015.03.011>

Galinina, O, Mikhaylov, K, Andreev, S, Turlikov, A & Koucheryavy, Y 2015, 'Smart home gateway system over Bluetooth low energy with wireless energy transfer capability', *Eurasip Journal on Wireless Communications and Networking*, Vuosikerta. 2015, Nro 1, 178. <https://doi.org/10.1186/s13638-015-0393-3>

Dricot, A, Jung, J, Cagnazzo, M, Pesquet, B, Dufaux, F, Kovács, P & Adhikarla, VK 2015, 'Subjective evaluation of Super Multi-View compressed contents on high-end light-field 3D displays', *Signal Processing: Image Communication*, Vuosikerta. 39, Nro Part B, Sivut 369–385. <https://doi.org/10.1016/j.image.2015.04.012>

Iosifidis, A, Tefas, A & Pitas, I 2014, 'Class-Specific Reference Discriminant Analysis With Application in Human Behavior Analysis', *IEEE Transactions on Human-Machine Systems*, Vuosikerta. 45, Nro 3, Sivut 315-326. <https://doi.org/10.1109/THMS.2014.2379274>

Irofti, P & Dumitrescu, B 2014, GPU parallel implementation of the approximate K-SVD algorithm using OpenCL. julkaisussa *2014 Proceedings of the 22nd European Signal Processing Conference (EUSIPCO)*. European Signal Processing Conference, EUSIPCO, Sivut 271-275, EUROPEAN SIGNAL PROCESSING CONFERENCE, 1/01/00.

Iosifidis, A, Tefas, A, Nikolaidis, N & Pitas, I 2014, Human action recognition in stereoscopic videos based on bag of features and disparity pyramids. julkaisussa *European Signal Processing Conference*. European Signal Processing Conference, EUSIPCO, Sivut 1317-1321, Lisbon, Portugali, 1/09/14.

Iosifidis, A, Tefas, A & Pitas, I 2014, 'Discriminant Bag of Words based representation for human action recognition', *Pattern Recognition Letters*, Vuosikerta. 49, Sivut 185-192. <https://doi.org/10.1016/j.patrec.2014.07.011>

Iosifidis, A, Tefas, A & Pitas, I 2014, 'Kernel reference discriminant analysis', *Pattern Recognition Letters*, Vuosikerta. 49, Sivut 85-91. <https://doi.org/10.1016/j.patrec.2014.06.013>

De Wit, JJM, Harmanny, RIA & Molchanov, P 2014, Radar micro-Doppler feature extraction using the Singular Value Decomposition. julkaisussa *2014 International Radar Conference, Radar 2014*. The Institute of Electrical and Electronics Engineers, Inc., IEEE RADAR CONFERENCE, 1/01/00. <https://doi.org/10.1109/RADAR.2014.7060268>

Hu, S, Jin, L & Kuo, C-CJ 2014, Compressed video quality assessment with modified MSE. julkaisussa *2014 Asia-Pacific Signal and Information Processing Association Annual Summit and Conference, APSIPA 2014*. The Institute of Electrical and Electronics Engineers, Inc., ASIA-PACIFIC SIGNAL AND INFORMATION PROCESSING ASSOCIATION ANNUAL SUMMIT AND CONFERENCE, 1/01/00. <https://doi.org/10.1109/APSIPA.2014.7041643>

Barford, L, Bhattacharyya, SS & Liu, Y 2014, Data flow algorithms for processors with vector extensions: Handling actors with internal state. julkaisussa *2014 IEEE Global Conference on Signal and Information Processing, GlobalSIP 2014.*, 7032070, Institute of Electrical and Electronics Engineers Inc., Sivut 20-24, Atlanta, Yhdysvallat, 3/12/14. <https://doi.org/10.1109/GlobalSIP.2014.7032070>

Heulot, J, Pelcat, M, Nezan, JF, Oliva, Y, Aridhi, S & Bhattacharyya, SS 2014, Just-in-time scheduling techniques for multicore signal processing systems. julkaisussa *2014 IEEE Global Conference on Signal and Information Processing, GlobalSIP 2014.*, 7032071, Institute of Electrical and Electronics Engineers Inc., Sivut 25-29, Atlanta, Yhdysvallat, 3/12/14

. <https://doi.org/10.1109/GlobalSIP.2014.7032071>

Lee, CS, Chen, WC, Bhattacharyya, SS & Lee, TS 2014, Dynamic, data-driven spectrum management in cognitive small cell networks. julkaisussa *2014, 8th International Conference on Signal Processing and Communication Systems, ICSPCS 2014 - Proceedings.*, 7021121, Institute of Electrical and Electronics Engineers Inc., Gold Coast, Australia, 15/12/14. <https://doi.org/10.1109/ICSPCS.2014.7021121>

Michalás, A & Komninos, N 2014, The lord of the sense: A privacy preserving reputation system for participatory sensing applications. julkaisussa *2014 IEEE Symposium on Computers and Communications, ISCC 2014 - Proceedings.*, 6912480, Institute of Electrical and Electronics Engineers Inc., Funchal, Portugal, 23/06/14. <https://doi.org/10.1109/ISCC.2014.6912480>

Ozan, EC, Tankiz, S, Acar, BO & Ciloglu, T 2014, An Unsupervised Audio Segmentation Method Using Bayesian Information Criterion. julkaisussa *6th International Symposium on Communications, Control & Signal Processing, ISCCSP, 21-23.5.2014, Athens, Greece.* IEEE, NEW YORK, Sivut 640-643, International symposium on communications, control and signal processing, 1/01/14. <https://doi.org/10.1109/ISCCSP.2014.6877956>

Bhattacharyya, SS, Van Der Schaar, M, Atan, O, Tekin, C & Sudusinghe, K 2014, Data-driven stream mining systems for computer vision. julkaisussa *Advances in Computer Vision and Pattern Recognition.* Vuosikerta. 68, Advances in Computer Vision and Pattern Recognition, Vuosikerta. 68, SPRINGER-VERLAG LONDON LTD, Sivut 249-264. https://doi.org/10.1007/978-3-319-09387-1_12

Korpi, D, Anttila, L & Valkama, M 2014, Impact of received signal on self-interference channel estimation and achievable rates in in-band full-duplex transceivers. julkaisussa *2014 48th Asilomar Conference on Signals, Systems and Computers.* IEEE COMPUTER SOCIETY PRESS, Sivut 975-982, ASILOMAR CONFERENCE ON SIGNALS, SYSTEMS AND COMPUTERS, 1/01/00. <https://doi.org/10.1109/ACSSC.2014.7094599>

Kim, SC & Bhattacharyya, SS 2014, 'Implementation of a high-throughput low-latency polyphase channelizer on GPUs Design and Architectures for Signal and Image Processing 2008', *Eurasip Journal on Advances in Signal Processing*, Vuosikerta. 2014, Nro 1. <https://doi.org/10.1186/1687-6180-2014-141>

Iosifidis, A, Tefas, A & Pitas, I 2014, Minimum Variance Extreme Learning Machine for human action recognition. julkaisussa *ICASSP, IEEE International Conference on Acoustics, Speech and Signal Processing - Proceedings.*, 6854640, The Institute of Electrical and Electronics Engineers, Inc., Sivut 5427-5431, Florence, Italia, 4/05/14. <https://doi.org/10.1109/ICASSP.2014.6854640>

Kovács, P, Samiee, K & Gabbouj, M 2014, On application of rational Discrete Short Time Fourier Transform in epileptic seizure classification. julkaisussa *2014 IEEE International Conference on Acoustics, Speech and Signal processing (ICASSP), May 4-9 2014, Florence, Italy.*, 6854723, IEEE International Conference on Acoustics, Speech and Signal Processing, IEEE, Piscataway, Sivut 5839-5843, IEEE INTERNATIONAL CONFERENCE ON ACOUSTICS, SPEECH AND SIGNAL PROCESSING, 1/01/00. <https://doi.org/10.1109/ICASSP.2014.6854723>

Yviquel, H, Boutellier, J, Raulet, M & Casseau, E 2013, 'Automated design of networks of transport-triggered architecture processors using dynamic dataflow programs', *Signal Processing: Image Communication*, Vuosikerta. 28, Nro 10, Sivut 1295-1302. <https://doi.org/10.1016/j.image.2013.08.013>

Boutellier, J & Silvén, O 2013, 'Towards generic embedded multiprocessing for RVC-CAL dataflow programs', *Journal of Signal Processing Systems*, Vuosikerta. 73, Nro 2, Sivut 137-142. <https://doi.org/10.1007/s11265-013-0737-3>

Cho, I, Shen, CC, Tachwali, Y, Hsu, CJ & Bhattacharyya, SS 2013, Configurable, resource-optimized FFT architecture for OFDM communication. julkaisussa *2013 IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2013 - Proceedings.*, 6638156, Sivut 2746-2750, Vancouver, BC, Kanada, 26/05/13. <https://doi.org/10.1109/ICASSP.2013.6638156>

Hautala, I, Boutellier, J & Hannuksela, J 2013, Programmable lowpower implementation of the HEVC Adaptive Loop Filter . julkaisussa *2013 IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2013 - Proceedings.*, 6638139, Sivut 2664-2668, Vancouver, BC, Kanada, 26/05/13. <https://doi.org/10.1109/ICASSP.2013.6638139>

Yi, X, Cho, C, Cooper, J, Wang, Y, Tentzeris, MM & Leon, RT 2013, 'Passive wireless antenna sensor for strain and crack sensing - Electromagnetic modeling, simulation, and testing', *Smart Materials and Structures*, Vuosikerta. 22, Nro 8, 085009. <https://doi.org/10.1088/0964-1726/22/8/085009>

Mäki-Marttunen, TM, Acimovic, J, Ruohonen, KP & Linne, M-L 2013, On the effect of network structure and synaptic mechanisms on sustained bursting activity. julkaisussa G Cymbalyuk & A Prinz (toim), *Twenty Second Annual Computational Neuroscience Meeting: CNS*2013*. Vuosikerta. Volume 14 Suppl 1, BioMed Central, Paris, France, Sivut P247, Paris, Ranska, 13/07/13.

Iosifidis, A, Tefas, A & Pitas, I 2013, 'Multi-view action recognition based on action volumes, fuzzy distances and cluster discriminant analysis', *Signal Processing*, Vuosikerta. 93, Nro 6, Sivut 1445-1457. <https://doi.org/10.1016/j.sigpro.2012.08.015>

Zaki, GF, Plishker, W, Bhattacharyya, SS, Clancy, C & Kuykendall, J 2013, 'Integration of dataflow-based heterogeneous multiprocessor scheduling techniques in GNU radio', *Journal of Signal Processing Systems*, Vuosikerta. 70, Nro 2, Sivut 177-191. <https://doi.org/10.1007/s11265-012-0696-0>

Kim, SC, Plishker, WL & Bhattacharyya, SS 2013, An efficient GPU implementation of an arbitrary resampling polyphase channelizer. julkaisussa *DASIP 2013 - Proceedings of the 2013 Conference on Design and Architectures for Signal and Image Processing.*, 6661548, Sivut 231-238, Cagliari, Italia, 8/10/13.

Betrouni, N, Colin, P, Puech, P, Villers, A & Mordon, S 2013, An image guided treatment platform for prostate cancer photodynamic therapy. julkaisussa *2013 35th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, EMBC 2013.*, 6609514, Sivut 370-373, Osaka, Japani, 3/07/13. <https://doi.org/10.1109/EMBC.2013.6609514>

Cho, I, Sudusinghe, K, Shen, CC, McGee, J & Bhattacharyya, S 2013, A system-level design approach for dynamic resource coordination and energy optimization in sensor network platforms. julkaisussa *Conference Record of the 47th Asilomar Conference on Signals, Systems and Computers.*, 6810533, IEEE COMPUTER SOCIETY PRESS, Sivut 1436-1441, Pacific Grove, CA, Yhdysvallat, 3/11/13. <https://doi.org/10.1109/ACSSC.2013.6810533>

Boutellier, J, Raulet, M & Silvén, O 2013, 'Automatic hierarchical discovery of quasi-static schedules of RVC-CAL dataflow programs', *Journal of Signal Processing Systems*, Vuosikerta. 71, Nro 1, Sivut 35-40. <https://doi.org/10.1007/s11265-012-0676-4>

Kong, L, Aho, KL, Granberg, K, Roos, C & Autio, R 2013, DBComposer: An R package for integrative analysis and management of gene expression microarray data. julkaisussa *2013 IEEE International Workshop on Genomic Signal Processing and Statistics, GENSIPS 2013 - Proceedings.*, 6735944, Sivut 92-93, Houston, TX, Yhdysvallat, 17/11/13. <https://doi.org/10.1109/GENSIPS.2013.6735944>

Casale-Brunet, S, Bezati, E, Alberti, C, Roquier, G, Mattavelli, M, Janneck, JW & Boutellier, J 2013, Design space exploration and implementation of RVC-CAL applications using the TURNUS framework. julkaisussa *DASIP 2013 - Proceedings of the 2013 Conference on Design and Architectures for Signal and Image Processing.*, 6661566, Sivut 341-342, Cagliari, Italia, 8/10/13.

Iosifidis, A, Tefas, A & Pitas, I 2013, Dynamic action classification based on iterative data selection and Feedforward Neural networks. julkaisussa *European Signal Processing Conference.*, 6811572, European Signal Processing Conference, EUSIPCO, Marrakech, Marokko, 9/09/13.

Iosifidis, A, Tefas, A & Pitas, I 2013, 'Dynamic action recognition based on dynemes and Extreme Learning Machine', *Pattern Recognition Letters*, Vuosikerta. 34, Nro 15, Sivut 1890-1898. <https://doi.org/10.1016/j.patrec.2012.10.019>

Boutellier, J, Ghazi, A, Silvén, O & Ersfolk, J 2013, High-performance programs by source-level merging of RVC-CAL dataflow actors. julkaisussa *2013 IEEE Workshop on Signal Processing Systems, SiPS 2013.*, 6674533, Institute of Electrical and Electronics Engineers Inc., Sivut 360-365, Taipei, Taiwan, 16/10/13.

Peltonen, J & Lin, Z 2013, Multiplicative update for fast optimization of information retrieval based neighbor embedding. julkaisussa *2013 IEEE International Workshop on Machine Learning for Signal Processing - Proceedings of MLSP 2013.*, 6661899, Southampton, Iso-Britannia, 22/09/13. <https://doi.org/10.1109/MLSP.2013.6661899>

Iosifidis, A, Tefas, A & Pitas, I 2013, Multi-view human action recognition: A survey. julkaisussa *Proceedings - 2013 9th International Conference on Intelligent Information Hiding and Multimedia Signal Processing, IIH-MSP 2013.* IEEE COMPUTER SOCIETY PRESS, Sivut 522-525, Beijing, Kiina, 16/10/13. <https://doi.org/10.1109/IIH-MSP.2013.135>

Wang, LH, Shen, CC & Bhattacharyya, SS 2013, Parameterized core functional dataflow graphs and their application to design and implementation of wireless communication systems. julkaisussa *2013 IEEE Workshop on Signal Processing Systems, SiPS 2013.*, 6674471, Institute of Electrical and Electronics Engineers Inc., Sivut 1-6, Taipei, Taiwan, 16/10/13.

Wang, LH, Shen, CC, Wu, S & Bhattacharyya, SS 2013, 'Parameterized scheduling of topological patterns in signal processing dataflow graphs', *Journal of Signal Processing Systems*, Vuosikerta. 71, Nro 3, Sivut 275-286. <https://doi.org/10.1007/s11265-012-0719-x>

Ghazi, A, Boutellier, J, Hannuksela, J, Shahabuddin, S & Silvén, O 2013, Programmable implementation of zero-crossing demodulator on an application specific processor. julkaisussa *2013 IEEE Workshop on Signal Processing Systems, SiPS 2013.*, 6674510, Institute of Electrical and Electronics Engineers Inc., Sivut 231-236, Taipei, Taiwan, 16/10/13.

Efimushkina, T, Egiazarian, K & Gabbouj, M 2013, Rate-distortion based reversible watermarking for JPEG images with quality factors selection. julkaisussa *2013 4th European Workshop on Visual Information Processing, EUVIP 2013, Paris, France, 10.-12.2013.*, 6623958, European Workshop on Visual Information Processing, University of Paris 13, Sivut 94-99, Paris, Ranska, 10/06/13.

Iosifidis, A, Tefas, A & Pitas, I 2013, Representative class vector clustering-based discriminant analysis. julkaisussa *Proceedings - 2013 9th International Conference on Intelligent Information Hiding and Multimedia Signal Processing, IIH-MSP 2013.* IEEE COMPUTER SOCIETY PRESS, Sivut 526-529, Beijing, Kiina, 16/10/13. <https://doi.org/10.1109/IIH-MSP.2013.136>

Boutellier, J, Lundbom, I, Janhunen, J, Ylimainen, J & Hannuksela, J 2012, Application-specific instruction processor for extracting local binary patterns. julkaisussa *DASIP 2012 - Proceedings of the 2012 Conference on Design and Architectures for Signal and Image Processing.*, 6385363, Sivut 82-89, Karlsruhe, Saksa, 23/10/12.

Shen, CC, Wu, S, Sane, N, Wu, HH, Plishker, W & Bhattacharyya, SS 2012, 'Design and synthesis for multimedia systems using the targeted dataflow interchange format', *IEEE Transactions on Multimedia*, Vuosikerta. 14, Nro 3 PART1, 6172244, Sivut 630-640. <https://doi.org/10.1109/TMM.2012.2191397>

Peltonen, J & Georgatzis, K 2012, Efficient optimization for data visualization as an information retrieval task. julkaisussa *2012 IEEE International Workshop on Machine Learning for Signal Processing - Proceedings of MLSP 2012.*, 6349797, Santander, Espanja, 23/09/12. <https://doi.org/10.1109/MLSP.2012.6349797>

Kim, SC, Plishker, WL, Bhattacharyya, SS & Cavallaro, JR 2012, GPU-based acceleration of symbol timing recovery. julkaisussa *DASIP 2012 - Proceedings of the 2012 Conference on Design and Architectures for Signal and Image Processing.*, 6385393, Sivut 273-280, Karlsruhe, Saksa, 23/10/12.

Kee, H, Shen, CC, Bhattacharyya, SS, Wong, I, Rao, Y & Kornerup, J 2012, 'Mapping parameterized cyclo-static dataflow graphs onto configurable hardware', *Journal of Signal Processing Systems*, Vuosikerta. 66, Nro 3, Sivut 285-301. <https://doi.org/10.1007/s11265-011-0599-5>

Wang, LH, Shen, CC, Seetharaman, G, Palaniappan, K & Bhattacharyya, SS 2012, Multidimensional dataflow graph modeling and mapping for efficient GPU implementation. julkaisussa *Proceedings - 2012 IEEE Workshop on Signal Processing Systems, SiPS 2012.*, 6363272, Sivut 300-305, Quebec City, QC, Kanada, 17/10/12. <https://doi.org/10.1109/SiPS.2012.10>

Won, S, Shen, CC & Bhattacharyya, SS 2012, NT-SIM: A co-simulator for networked signal processing applications. julkaisussa *Proceedings of the 20th European Signal Processing Conference, EUSIPCO 2012.*, 6334198, Sivut 1094-1098, Bucharest, 27/08/12.

Wu, S, Shen, CC, Sane, N, Davis, K & Bhattacharyya, SS 2012, Parameterized scheduling for signal processing systems using topological patterns. julkaisussa *2012 IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2012 - Proceedings.*, 6288190, Sivut 1561-1564, Kyoto, Japani, 25/03/12. <https://doi.org/10.1109/ICASSP.2012.6288190>

Zhou, Z, Shen, CC, Plishker, W, Wu, HH & Bhattacharyya, SS 2012, Systematic integration of flowgraph- and module-level parallelism in implementation of DSP applications on multiprocessor systems-on-chip. julkaisussa *ICSP 2012 - 2012 11th International Conference on Signal Processing, Proceedings.* Vuosikerta. 1, 6491686, Sivut 402-408, Beijing, Kiina, 21/10/12. <https://doi.org/10.1109/ICoSP.2012.6491686>

Mäki-Marttunen, TM, Acimovic, J, Ruohonen, KP & Linne, M-L 2011, Effects of local structure of neuronal networks on spiking activity in silico. julkaisussa J-M Fellous & A Prinz (toim), *Twentieth Annual Computational Neuroscience Meeting: CNS*2011.* Vuosikerta. 12 (Suppl 1), BioMed Central, Stockholm, Sivut P202, Stockholm, Ruotsi, 23/07/11.

Acimovic, J 2011, Emergence of global and local structural features during development of neuronal networks. julkaisussa *Proceedings of the Eighth International Workshop on Computational Systems Biology, WCSB 2011, June 6-8, 2011, Zürich, Switzerland* . TICSP Series , Vuosikerta. 57, TICSP, Tampere, 1/01/11.

Bhattacharyya, SS, Eker, J, Janneck, JW, Lucarz, C, Mattavelli, M & Raulet, M 2011, 'Overview of the MPEG reconfigurable video coding framework', *Journal of Signal Processing Systems*, Vuosikerta. 63, Nro 2, Sivut 251-263. <https://doi.org/10.1007/s11265-009-0399-3>

Boutellier, J, Lucarz, C, Lafond, S, Gomez, VM & Mattavelli, M 2011, 'Quasi-static scheduling of CAL actor networks for reconfigurable video coding', *Journal of Signal Processing Systems*, Vuosikerta. 63, Nro 2, Sivut 191-202. <https://doi.org/10.1007/s11265-009-0389-5>

Mäki-Marttunen, T, Acimovic, J, Ruohonen, K & Linne, M-L 2011, Effects of structure on spontaneous activity in simulated neuronal networks. julkaisussa *Proceedings of Mathematical Neuroscience (ICMS 2011), April 11-13, 2011, Edinburgh, Scotland.*, Edinburgh, Iso-Britannia, 11/04/11.

Gu, R, Janneck, JW, Raulet, M & Bhattacharyya, SS 2011, 'Exploiting statically schedulable regions in dataflow programs', *Journal of Signal Processing Systems*, Vuosikerta. 63, Nro 1, Sivut 129-142. <https://doi.org/10.1007/s11265-009-0445-1>

Pursiainen, S, Sorrentino, A, Campi, C & Piana, M 2011, 'Forward simulation and inverse dipole localization with the lowest order Raviart - Thomas elements for electroencephalography', *Inverse Problems*, Vuosikerta. 27, Nro 4, 045003. <https://doi.org/10.1088/0266-5611/27/4/045003>

Kaski, S & Peltonen, J 2011, 'Dimensionality reduction for data visualization', *IEEE Signal Processing Magazine*, Vuosikerta. 28, Nro 2, 5714379, Sivut 100-104. <https://doi.org/10.1109/MSP.2010.940003>

Boutellier, J, Silvén, O & Raulet, M 2011, Automatic synthesis of TTA processor networks from RVC-CAL dataflow programs. julkaisussa *2011 IEEE Workshop on Signal Processing Systems, SiPS 2011, Proceedings.*, 6088944, Sivut 25-30, Beirut, Libanon, 4/10/11. <https://doi.org/10.1109/SiPS.2011.6088944>

Zabrodina, V, Abramov, S, Lukin, V, Astola, J, Vozel, B & Chehdi, K 2011, Blind estimation of mixed noise parameters in images using robust regression curve fitting. julkaisussa *European Signal Processing Conference*. Sivut 1135-1139.

Kedilaya, S, Plishker, W, Purkovic, A, Johnson, B & Bhattacharyya, SS 2011, Model-based precision analysis and optimization for digital signal processors. julkaisussa *European Signal Processing Conference*. Sivut 506-510.

Bhattacharyya, SS, Plishker, W, Sane, N, Shen, CC & Wu, HH 2011, Modeling and optimization of dynamic signal processing in resource-aware sensor networks. julkaisussa *2011 8th IEEE International Conference on Advanced Video and Signal Based Surveillance, AVSS 2011.*, 6027374, Sivut 449-454, Klagenfurt, Itävalta, 30/08/11.
<https://doi.org/10.1109/AVSS.2011.6027374>

Ivanov, S, Botvich, D & Balasubramaniam, S 2011, On delay distribution in IEEE 802.11 wireless networks. julkaisussa *16th IEEE Symposium on Computers and Communications, ISCC'11.*, 5983849, Sivut 254-256, Corfu, Kreikka, 28/06/11.
<https://doi.org/10.1109/ISCC.2011.5983849>

Boutellier, J, Silven, O & Raulet, M 2011, Scheduling of CAL actor networks based on dynamic code analysis. julkaisussa *2011 IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2011 - Proceedings.*, 5946805, Sivut 1609-1612, Prague, Tšekki, 22/05/11. <https://doi.org/10.1109/ICASSP.2011.5946805>

Sane, N, Kee, H, Seetharaman, G & Bhattacharyya, SS 2011, 'Topological patterns for scalable representation and analysis of dataflow graphs', *Journal of Signal Processing Systems*, Vuosikerta. 65, Nro 2, Sivut 229-244.
<https://doi.org/10.1007/s11265-011-0610-1>

Zaki, GF, Plishker, W, Bhattacharyya, SS, Clancy, C & Kuykendall, J 2011, Vectorization and mapping of software defined radio applications on heterogeneous multi-processor platforms. julkaisussa *2011 IEEE Workshop on Signal Processing Systems, SiPS 2011, Proceedings.*, 6088945, Sivut 31-36, Beirut, Libanon, 4/10/11.
<https://doi.org/10.1109/SiPS.2011.6088945>

Acimovic, J, Mäki-Marttunen, T & Linne, M-L 2010, Computational modeling of growth in cortical cultures using the NETMORPH simulation tool. julkaisussa *Neuroscience 2010, 40th Annual Meeting, San Diego, USA, 13-17 November 2010*. Sivut 2 p, San Diego, Yhdysvallat, 13/11/10.

Acimovic, J, Teppola, H, Selinummi, JJ & Linne, M-L 2009, Computational tools for assessing the properties of 2D neural cell cultures. julkaisussa D Johnson (Toimittaja), *Eighteenth Annual Computational Neuroscience Meeting: CNS*2009*. Vuosikerta. 10 (Suppl 1), P170, BioMed Central, Berlin, Sivut P170, Berlin, Saksa, 13/07/09.

Acimovic, J 2009, 'Neural networks, cell cultures and some older work on data analysis.' Artikkeliesitety, Japani, 15/06/09 - 2/07/09, .

Koivuluoma, M, Barna, L, Koivistoinen, T, Kööbi, T & Värrä, A 2008, Influences of digital band-pass filtering on the BCG waveform. julkaisussa *BIOSIGNALS 2008 - Proceedings of the 1st International Conference on Bio-inspired Systems and Signal Processing*. Sivut 84-89, Funchal, Madeira, Portugali, 28/01/08.