

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? / Acimovic, Jugoslava; Teppola, Heidi; Mäki-Marttunen, Tuomo Mikael ; Linne, Marja-Leena.

In: BMC Neuroscience, Vol. 19, No. Suppl 2, 29.10.2018, p. 68-69.

Research output: Contribution to journal > Meeting Abstract > Scientific > peer-review

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? / Acimovic, Jugoslava; Teppola, Heidi; Mäki-Marttunen, Tuomo Mikael ; Linne, Marja-Leena.

2018. Paper presented at Brain and Mind Symposium 2018, Helsinki, Finland.

Research output: Other conference contribution > Paper, poster or abstract > Scientific

Neural networks, cell cultures and some older work on data analysis. / Acimovic, Jugoslava.

2009. Paper presented at Okinawa Computational Neuroscience Course 2009, Japan.

Research output: Other conference contribution > Paper, poster or abstract > Scientific

Effects of local structure of neuronal networks on spiking activity in silico. / Mäki-Marttunen, Tuomo Mikael; Acimovic, Jugoslava; Ruohonen, Keijo Pellervo; Linne, Marja-Leena.

Twentieth Annual Computational Neuroscience Meeting: CNS*2011. ed. / Jean-Marc Fellous; Astrid Prinz. Vol. 12 (Suppl 1) Stockholm : BioMed Central, 2011. p. P202.

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

Influences of digital band-pass filtering on the BCG waveform. / Koivuluoma, Mikko; Barna, Laurentiu; Koivistoinen, Teemu; Kööbi, Tiit; Värrä, Alpo.

BIOSIGNALS 2008 - Proceedings of the 1st International Conference on Bio-inspired Systems and Signal Processing. 2008. p. 84-89.

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

Guest Editorial Special Issue on Multimedia Big Data in Internet of Things. / Ma, Huadong; Yu, Shui; Gabbouj, Moncef; Mueller, Peter.

In: IEEE Internet of Things Journal, Vol. 5, No. 5, 8534720, 10.2018, p. 3405-3407.

Research output: Contribution to journal > Editorial > Scientific

Guest Editorial : Implementation Issues in System-on-Chip. / Ellerjee, Peeter; Nurmi, Jari.

In: Journal of Signal Processing Systems, Vol. 87, No. 3, 01.06.2017, p. 269-270.

Research output: Contribution to journal > Editorial > Scientific

Introduction to the Special Section on Sound Scene and Event Analysis. / Richard, G.; Virtanen, T.; Bello, J. P.; Ono, N.; Glotin, H.

In: IEEE/ACM Transactions on Audio Speech and Language Processing, Vol. 25, No. 6, 01.06.2017, p. 1169-1171.

Research output: Contribution to journal > Article > Scientific

Guest editorial special issue on the internet of nano things. / Balasubramaniam, Sasitharan; Jornet, Josep Miquel; Pierobon, Massimiliano; Koucheryavy, Yevgeni.

In: IEEE Internet of Things Journal, Vol. 3, No. 1, 01.02.2016, p. 1-3.

Research output: Contribution to journal > Article > Scientific

Radio-based Sensing and Indoor Mapping with Millimeter-Wave 5G NR Signals. / Barneto, Carlos Baquero; Riihonen, Taneli; Turunen, Matias; Koivisto, Mike; Talvitie, Jukka; Valkama, Mikko.

2020 International Conference on Localization and GNSS, ICL-GNSS 2020 - Proceedings. ed. / Jari Nurmi; Elena-Simona Lohan; Joaquin Torres-Sospedra; Heidi Kuusniemi; Aleksandr Ometov. IEEE, 2020. (2020 International Conference on Localization and GNSS, ICL-GNSS 2020 - Proceedings).

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

Positioning Based on Noise-Limited Censored Path Loss Data. / Karttunen, Aki; Valkama, Mikko; Talvitie, Jukka.

2020 International Conference on Localization and GNSS, ICL-GNSS 2020 - Proceedings. ed. / Jari Nurmi; Elena-Simona Lohan; Joaquin Torres-Sospedra; Heidi Kuusniemi; Aleksandr Ometov. IEEE, 2020. (2020 International Conference on Localization and GNSS, ICL-GNSS 2020 - Proceedings).

Modeling and Mitigating 5G Wireless Downlink Interferences for Low-altitude Aerial vehicles. / Wang, Wenbo; Fath, Thilo; Valkama, Mikko; Lohan, Elena Simona.

2020 International Conference on Localization and GNSS, ICL-GNSS 2020 - Proceedings. ed. / Jari Nurmi; Elena-Simona Lohan; Joaquin Torres-Sospedra; Heidi Kuusniemi; Aleksandr Ometov. IEEE, 2020. (2020 International Conference on Localization and GNSS, ICL-GNSS 2020 - Proceedings).

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

Analog Mitigation of Frequency-Modulated Interference for Improved GNSS Reception. / Parlin, Karel; Riihonen, Taneli.

2020 International Conference on Localization and GNSS, ICL-GNSS 2020 - Proceedings. ed. / Jari Nurmi; Elena-Simona Lohan; Joaquin Torres-Sospedra; Heidi Kuusniemi; Aleksandr Ometov. IEEE, 2020. (2020 International Conference on Localization and GNSS, ICL-GNSS 2020 - Proceedings).

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

Adaptive Normalization for Forecasting Limit Order Book Data Using Convolutional Neural Networks. / Passalis, Nikolaos; Tefas, Anastasios; Kannainen, Juho; Gabbouj, Moncef; Iosifidis, Alexandros.

2020 IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2020 - Proceedings. IEEE, 2020. p. 1713-1717 (ICASSP, IEEE International Conference on Acoustics, Speech and Signal Processing - Proceedings; Vol. 2020-May).

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

Peer to Peer Offloading with Delayed Feedback : An Adversary Bandit Approach. / Yang, Miao; Zhu, Hongbin; Wang, Haifeng; Koucheryavy, Yevgeni; Samouylov, Konstantin; Qian, Hua.

2020 IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2020 - Proceedings. IEEE, 2020. p. 5035-5039 (ICASSP, IEEE International Conference on Acoustics, Speech and Signal Processing - Proceedings; Vol. 2020-May).

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

5G new radio evolution towards sub-THz communications. / Tervo, Oskari; Levanen, Toni; Pajukoski, Kari; Hulkkonen, Jari; Wainio, Pekka; Valkama, Mikko.

2nd 6G Wireless Summit 2020: Gain Edge for the 6G Era, 6G SUMMIT 2020. IEEE, 2020.

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

Protective Coating Methods for Glove-Integrated RFID Tags - A Preliminary Study. / Khan, Zahangir; He, Han; Chen, Xiaochen; Ukkonen, Leena; Virkki, Johanna.

14th European Conference on Antennas and Propagation, EuCAP 2020. IEEE, 2020. 9135632 (14th European Conference on Antennas and Propagation, EuCAP 2020).

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

Headband Antenna for Wireless Power Transfer to Millimeter-Sized Neural Implants with Minimal Misalignment Effects. / Ahmed, Shahbaz; Sydänheimo, Lauri; Ukkonen, Leena; Björninen, Toni.

14th European Conference on Antennas and Propagation, EuCAP 2020. IEEE, 2020. (14th European Conference on Antennas and Propagation, EuCAP 2020).

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

Circularly Polarized Corner-Truncated and Slotted Microstrip Patch Antenna on Textile Substrate for Wearable Passive UHF RFID Tags. / Le, Duc; Ukkonen, Leena; Björninen, Toni.

14th European Conference on Antennas and Propagation, EuCAP 2020. IEEE, 2020. (14th European Conference on Antennas and Propagation, EuCAP 2020).

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

Measurements of Reflection and Penetration Losses in Low Terahertz Band Vehicular Communications. / Petrov, Vitaly; Eckhardt, Johannes M.; Moltchanov, Dmitri; Koucheryavy, Yevgeni; Kurner, Thomas.

14th European Conference on Antennas and Propagation, EuCAP 2020. Institute of Electrical and Electronics Engineers Inc., 2020. (14th European Conference on Antennas and Propagation, EuCAP 2020).

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

Towards Asteroid Tomography : Modellings and Measurements Using an Analogue Model. / Eyraud, C.; Sorsa, L. I.; Herique, A.; Geffrin, J. M.; Pursiainen, S.; Kofman, W.
14th European Conference on Antennas and Propagation, EuCAP 2020. IEEE, 2020. (14th European Conference on Antennas and Propagation, EuCAP 2020).

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

Passive RFID-based Textile Touchpad. / He, Han; Chen, Xiaochen; Raivio, Leevi; Huttunen, Heikki; Virkki, Johanna.
14th European Conference on Antennas and Propagation, EuCAP 2020. IEEE, 2020. 9135201.
Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Constrained PSK : Energy-efficient modulation for Sub-THz systems. / Nasarre, Ismael Peruga; Levanen, Toni; Valkama, Mikko.
2020 IEEE International Conference on Communications Workshops, ICC Workshops 2020 - Proceedings. IEEE, 2020. (IEEE/CIC international conference on communications in China - workshops).
Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Reinforcement learning for improved UAV-based integrated access and backhaul operation. / Tafintsev, Nikita; Moltchanov, Dmitri; Simsek, Meryem; Yeh, Shu Ping; Andreev, Sergey; Koucheryavy, Yevgeni; Valkama, Mikko.
2020 IEEE International Conference on Communications Workshops, ICC Workshops 2020 - Proceedings. IEEE, 2020. (IEEE/CIC international conference on communications in China - workshops).
Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Comparing capacity gains of static and UAV-based millimeter-wave relays in clustered deployments. / Gapeyenko, Margarita; Petrov, Vitaly; Moltchanov, Dmitri; Yeh, Shu Ping; Himayat, Nageen; Andreev, Sergey.
2020 IEEE International Conference on Communications Workshops, ICC Workshops 2020 - Proceedings. IEEE, 2020. (IEEE/CIC international conference on communications in China - workshops).
Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Parametric exploration of cellular swelling in a computational model of cortical spreading depression. / Genocchi, Barbara ; Cunha, Andre; Jain, Soumil; Hyttinen, Jari; Lenk, Kerstin; Ellingsrud, Ada Johanne.
42nd Annual International Conferences of the IEEE Engineering in Medicine and Biology Society: Enabling Innovative Technologies for Global Healthcare, EMBC 2020. IEEE, 2020. p. 2491-2495 (Annual International Conference of the IEEE Engineering in Medicine and Biology Society; Vol. 2020-July).
Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Prototyping directional UAV-based wireless access and backhaul systems. / Gerasimenko, Mikhail; Pokorny, Jiri; Schneider, Tibor; Sirjov, Jakub; Andreev, Sergey; Hosek, Jiri.
2019 IEEE Global Communications Conference, GLOBECOM 2019 - Proceedings. IEEE, 2019. 9014228.
Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Optimized wake-up scheme with bounded delay for energy-efficient MTC. / Rostami, Soheil; Lagen, Sandra; Costa, Mario; Dini, Paolo; Valkama, Mikko.
2019 IEEE Global Communications Conference, GLOBECOM 2019 - Proceedings. IEEE, 2019. 9013534.
Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Gamified coding : Toy robots and playful learning in early education. / Heljakka, Katriina; Ihamaki, Pirita; Tuomi, Pauliina; Saarikoski, Petri.
Proceedings - 6th Annual Conference on Computational Science and Computational Intelligence, CSCI 2019. IEEE, 2019. p. 800-805 9071010.
Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

V2X Connectivity : From LTE to Joint Millimeter Wave Vehicular Communications and Radar Sensing. / Petrov, Vitaly; Fodor, Gabor; Andreev, Sergey; Do, Hieu; Sahlin, Henrik.
Conference Record - 53rd Asilomar Conference on Circuits, Systems and Computers, ACSSC 2019. ed. / Michael B. Matthews. IEEE Computer Society, 2019. p. 1120-1124 9048846 (Conference Record - Asilomar Conference on Signals, Systems and Computers; Vol. 2019-November).

Closed-Loop DPD for Digital MIMO Transmitters under Antenna Crosstalk. / Brihuega, Alberto; Abdelaziz, Mahmoud; Anttila, Lauri; Barneto, Carlos Baquero; Valkama, Mikko.

Conference Record - 53rd Asilomar Conference on Circuits, Systems and Computers, ACSSC 2019. ed. / Michael B. Matthews. IEEE Computer Society, 2019. p. 1682-1689 9049001 (Conference Record - Asilomar Conference on Signals, Systems and Computers; Vol. 2019-November).

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

Fast fourier color constancy and grayness index for ISPA illumination estimation challenge. / Qian, Yanlin; Chen, Ke; Yu, Huanglin.

ISPA 2019 - 11th International Symposium on Image and Signal Processing and Analysis. ed. / Sven Loncaric; Robert Bregovic; Marco Carli; Marko Subasic. IEEE, 2019. p. 352-354 (International Symposium on Image and Signal Processing and Analysis, ISPA; Vol. 2019-September).

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

Towards Algebraic Modeling of GPU Memory Access for Bank Conflict Mitigation. / Ferranti, Luca; Boutellier, Jani.

2019 IEEE International Workshop on Signal Processing Systems, SiPS 2019. IEEE, 2019. p. 103-108.

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

A perspective on wireless M-bus for smart electricity grids. / Masek, Pavel; Stusek, Martin; Zeman, Krystof; Mozny, Radek; Ometov, Aleksandr; Hosek, Jiří.

2019 42nd International Conference on Telecommunications and Signal Processing, TSP 2019. ed. / Norbert Herencsar. IEEE, 2019. p. 730-735.

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

On the performance of narrow-band internet of things (NB-IoT) for delay-tolerant services. / Mozny, Radek; Masek, Pavel; Stusek, Martin; Zeman, Krystof; Ometov, Aleksandr; Hosek, Jiří.

2019 42nd International Conference on Telecommunications and Signal Processing, TSP 2019. ed. / Norbert Herencsar. IEEE, 2019. p. 637-642 (2019 42nd International Conference on Telecommunications and Signal Processing, TSP 2019).

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

Input magnitude data setting in error-reduction algorithm for one-dimensional discrete phase retrieval problem. / Rusu, Cornelius; Astola, Jaakko.

ISSCS 2019 - International Symposium on Signals, Circuits and Systems. IEEE, 2019. 8801743.

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

User Experience Study of 360° Music Videos on Computer Monitor and Virtual Reality Goggles. / Holm, Jukka; Väänänen, Kaisa; Remans, Mohammad Mushfiqur Rahman.

Information Visualization - Biomedical Visualization and Geometric Modelling and Imaging, IV 2019. ed. / Ebad Banissi; Anna Ursyn; Mark W. McK. Bannatyne; Nuno Datia; Joao Moura Pires; Rita Francesca; Muhammad Sarfraz; Theodor G Wyeld; Fatma Bouali; Gilles Venturin; Hanane Azzag; Mustapha Lebbah; Marjan Trutschl; Urska Cvek; Heimo Muller; Minoru Nakayama; Sebastian Kernbach; Loredana Caruccio; Michele Risi; Ugo Erra; Autilia Vitiello; Veronica Rossano. IEEE, 2019. p. 81-87 (Proceedings of the International Conference on Information Visualisation).

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

Low-latency Deep Clustering for Speech Separation. / Wang, Shanshan; Naithani, Gaurav; Virtanen, Tuomas.

2019 IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2019 - Proceedings. IEEE, 2019. p. 76-80.

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

Time Difference of Arrival Estimation of Speech Signals Using Deep Neural Networks with Integrated Time-frequency Masking. / Pertilä, Pasi; Parviainen, Mikko.

2019 IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2019 - Proceedings. IEEE, 2019. p. 436-440.

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

Convex Energy Optimization of Streaming Applications for MPSoCs. / Nogues, E.; Mercat, A.; Arrestier, F.; Pelcat, M.; Menard, D.
2019 IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2019 - Proceedings. IEEE, 2019. p. 1557-1561.
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

Deep Reinforcement Learning for Financial Trading Using Price Trailing. / Zarkias, Konstantinos Saitas; Passalis, Nikolaos; Tsantekidis, Avraam; Tefas, Anastasios.
2019 IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2019 - Proceedings. IEEE, 2019. p. 3067-3071.
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

1-D Convolutional Neural Networks for Signal Processing Applications. / Kiranyaz, Serkan; Ince, Turker; Abdeljaber, Osama; Avci, Onur; Gabbouj, Moncef.
2019 IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2019 - Proceedings. IEEE, 2019. p. 8360-8364.
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

Deep Temporal Logistic Bag-of-features for Forecasting High Frequency Limit Order Book Time Series. / Passalis, Nikolaos; Tefas, Anastasios; Kannainen, Juho; Gabbouj, Moncef; Iosifidis, Alexandros.
2019 IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2019 - Proceedings. IEEE, 2019. p. 7545-7549.
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

Random Forest Oriented Fast QTBT Frame Partitioning. / Amestoy, Thomas; Mercat, Alexandre; Hamidouche, Wassim; Bergeron, Cyril; Menard, Daniel.
2019 IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2019 - Proceedings. IEEE, 2019. p. 1837-1841.
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

Open framework for mammography-based breast cancer risk assessment. / Pertuz, Said; Torres, German F.; Tamimi, Rulla; Kämäräinen, Jioni.
2019 IEEE EMBS International Conference on Biomedical and Health Informatics, BHI 2019 - Proceedings. IEEE, 2019.
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

Variance Preserving Initialization for Training Deep Neuromorphic Photonic Networks with Sinusoidal Activations. / Passalis, Nikolaos; Mourgas-Alexandris, George; Tsakiridis, Apostolos; Pleros, Nikos; Tefas, Anastasios.
2019 IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2019 - Proceedings. IEEE, 2019. p. 1483-1487.
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

Automatic detection of water inside concrete slabs using ground penetrating radar. / Khan, Muhammad Adnan; Vehmas, Risto; Visa, Ari.
2019 IEEE Radar Conference, RadarConf 2019. IEEE, 2019.
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

Exploiting Multipath Terahertz Communications for Physical Layer Security in beyond 5G Networks. / Petrov, Vitaly; Moltchanov, Dmitri; Jornet, Josep Miquel; Koucheryavy, Yevgeni.
INFOCOM 2019 - IEEE Conference on Computer Communications Workshops, INFOCOM WKSHPS 2019. IEEE, 2019. p. 865-872.
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

Improved Session Continuity in 5G NR with Joint Use of Multi-Connectivity and Guard Bandwidth. / Kovalchukov, Roman; Moltchanov, Dmitri; Begishev, Vyacheslav; Samuylov, Andrey; Andreev, Sergey; Koucheryavy, Yevgeni; Samouylov, Konstantin.
2018 IEEE Global Communications Conference, GLOBECOM 2018. IEEE, 2019.
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

Energy Detection-Based Spectrum Sensing over Fisher-Snedecor F Fading Channels. / Yoo, Seong Ki; Cotton, Simon L.; Sofotasios, Paschal C.; Muhaidat, Sami; Badarneh, Osamah S.; Karagiannidis, George K.
2018 IEEE Global Communications Conference. IEEE, 2019. 8647778.

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

The Direction Cosine Matrix Algorithm in Fixed-point: Implementation and Analysis. / Meirhaeghe, Alexandre; Boutellier, Jani; Collin, Jussi.

ICASSP 2019 - 2019 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP). IEEE, 2019.
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

Efficient Solving of Markov Decision Processes on GPUs Using Parallelized Sparse Matrices. / Sapio, Adrian; Bhattacharyya, Shuvra S.; Wolf, Marilyn.

2018 Conference on Design and Architectures for Signal and Image Processing, DASIP 2018. IEEE COMPUTER SOCIETY PRESS, 2018. p. 13-18 (Conference on Design and Architectures for Signal and Image Processing, DASIP).
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

An active learning method using clustering and committee-based sample selection for sound event classification. / Shuyang, Zhao; Heittola, Toni; Virtanen, Tuomas.

16th International Workshop on Acoustic Signal Enhancement, IWAENC 2018. IEEE, 2018. p. 116-120.

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

Using sequential information in polyphonic sound event detection. / Huang, Guangpu; Heittola, Toni; Virtanen, Tuomas.

16th International Workshop on Acoustic Signal Enhancement, IWAENC 2018. IEEE, 2018. p. 291-295.

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

Acoustic scene classification : An overview of dcase 2017 challenge entries. / Mesaros, Annamaria; Heittola, Toni; Virtanen, Tuomas.

16th International Workshop on Acoustic Signal Enhancement, IWAENC 2018. IEEE, 2018. p. 411-415.

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

Time-frequency masking strategies for single-channel low-latency speech enhancement using neural networks. / Parviainen, Mikko; Pertila, Pasi; Virtanen, Tuomas; Grosche, Peter.

16th International Workshop on Acoustic Signal Enhancement, IWAENC 2018. IEEE, 2018. p. 51-55.

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

Deep neural network based speech separation optimizing an objective estimator of intelligibility for low latency applications. / Naithani, Gaurav; Nikunen, Joonas; Bramslow, Lars; Virtanen, Tuomas.

16th International Workshop on Acoustic Signal Enhancement, IWAENC 2018. IEEE, 2018. p. 386-390.

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

Multichannel NMF for source separation with ambisonic signals. / Nikunen, Joonas; Politis, Archontis.

16th International Workshop on Acoustic Signal Enhancement, IWAENC 2018 . IEEE, 2018. p. 251-255.

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

Identification of Parkinson's Disease Utilizing a Single Self-recorded 20-step Walking Test Acquired by Smartphone's Inertial Measurement Unit. / Mehrang, Saeed; Jauhainen, Milla; Pietilä, Julia; Puustinen, Juha; Ruokolainen, Jari; Nieminen, Hannu.

40th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, EMBC 2018. Vol. 2018-July Institute of Electrical and Electronics Engineers Inc., 2018. p. 2913-2916 8512921.

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

Eigen Posture Based Fall Risk Assessment System Using Kinect. / Tripathy, Soumya Ranjan; Chakravarty, Kingshuk; Sinha, Aniruddha.

40th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, EMBC 2018. Vol. 2018-July IEEE, 2018. p. 1-4 8513263.

The Accuracy of Atrial Fibrillation Detection from Wrist Photoplethysmography. A Study on Post-Operative Patients. / Tarniceriu, Adrian; Harju, Jarkko; Yousefi, Zeinab Rezaei; Vehkaoja, Antti; Parak, Jakub; Yli-Hankala, Arvi; Korhonen, Ilkka.

40th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, EMBC 2018. Vol. 2018-July IEEE, 2018. p. 4844-4847 8513197.

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

LoTTA: Energy-Efficient Processor for Always-on Applications. / Multanen, Joonas; Kultala, Heikki; Jääskeläinen, Pekka; Viitanen, Timo; Tervo, Aleksi; Takala, Jarmo.

2018 IEEE International Workshop on Signal Processing Systems (SiPS). IEEE, 2018.

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

Estimation of time-varying room impulse responses of multiple sound sources from observed mixture and isolated source signals. / Nikunen, Joonas; Virtanen, Tuomas.

2018 IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2018 - Proceedings. Vol. 2018-April Institute of Electrical and Electronics Engineers Inc., 2018. p. 421-425 8462535 (Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing).

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

Low-energy graph fourier basis functions span salient objects. / Malik, Junaid; Aytekin, Caglar; Gabbouj, Moncef.

2018 IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2018 - Proceedings. Vol. 2018-April Institute of Electrical and Electronics Engineers Inc., 2018. p. 1548-1552 8462672.

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

Statistical Evaluation of Visual Quality Metrics for Image Denoising. / Egiazarian, Karen; Ponomarenko, Mykola; Lukin, Vladimir; Ieremeiev, Oleg.

2018 IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2018 - Proceedings. Vol. 2018-April Institute of Electrical and Electronics Engineers Inc., 2018. p. 6752-6756 8462294.

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

A joint target localization and classification framework for sensor networks. / Lee, Kyunghun; Riggan, Benjamin S.; Bhattacharyya, Shuvra S.

2018 IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2018 - Proceedings. Vol. 2018-April Institute of Electrical and Electronics Engineers Inc., 2018. p. 3076-3080 8462641.

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

2D Video Coding of Volumetric Video Data. / Schwarz, Sebastian; Hannuksela, Miska M.; Fakour-Sevom, Vida; Sheikhi-Pour, Nahid.

2018 Picture Coding Symposium, PCS 2018 - Proceedings. IEEE, 2018. p. 61-65 8456265.

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

User Positioning in mmW 5G Networks Using Beam-RSRP Measurements and Kalman Filtering. / Rastorgueva-Foi, Elizaveta; Costa, Mário; Koivisto, Mike; Leppänen, Kari; Valkama, Mikko.

2018 21st International Conference on Information Fusion, FUSION 2018. IEEE, 2018. p. 1150-1156 8455289.

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

Inertial Odometry on Handheld Smartphones. / Solin, Arno; Cortes, Santiago; Rahtu, Esa; Kannala, Juho.

2018 21st International Conference on Information Fusion, FUSION 2018. IEEE, 2018. p. 1361-1368 8455482.

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

Multi-source localization using a DOA Kernel based spatial covariance model and complex nonnegative matrix factorization. / Carabias-Orti, J. J.; Cabanas-Molero, P.; Vera-Candeas, P.; Nikunen, J.

2018 IEEE 10th Sensor Array and Multichannel Signal Processing Workshop, SAM 2018. IEEE, 2018. p. 440-444 8448664 (Proceedings of the IEEE Sensor Array and Multichannel Signal Processing Workshop).

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

Anisotropic Spatiotemporal Regularization in Compressive Video Recovery by Adaptively Modeling the Residual Errors as Correlated Noise. / Eslahi, Nasser; Foi, Alessandro.

2018 IEEE 13th Image, Video, and Multidimensional Signal Processing Workshop, IVMSWP 2018 - Proceedings. IEEE, 2018. 8448455.

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

Performance Evaluation of UAV-Assisted mmWave Operation in Mobility-Enabled Urban Deployments. / Khosravi, Zeinab; Gerasimenko, Mikhail; Andreev, Sergey; Koucheryavy, Yevgeni.

2018 41st International Conference on Telecommunications and Signal Processing, TSP 2018. IEEE, 2018. p. 150-153 8441321.

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

Data Clustering Based on Community Structure in Mutual k-Nearest Neighbor Graph. / Zhang, Honglei; Kiranyaz, Serkan; Gabbouj, Moncef.

2018 41st International Conference on Telecommunications and Signal Processing, TSP 2018. IEEE, 2018. p. 262-268 8441226.

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

Improvement of GPS and BeiDou extended orbit predictions with CNNs. / Pihlajasalo, Jaakko; Leppäkoski, Helena; Ali-Löytty, Simo; Piché, Robert.

26th European Navigation Conference, ENC 2018: Gothenburg, Sweden, 14-17 May, 2018. IEEE, 2018. p. 54-59 8433244.

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

Role of the user in information systems development. / Jaakkola, H.; Thalheim, B.; Henno, J.; Mäkelä, J.; Keto, H.

2018 41st International Convention on Information and Communication Technology, Electronics and Microelectronics, MIPRO 2018. IEEE, 2018. p. 625-632.

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

Adjusting university education with workspace training and self-education. / Henno, J.; Jaakkola, H.; Makela, J.

2018 41st International Convention on Information and Communication Technology, Electronics and Microelectronics, MIPRO 2018. IEEE, 2018. p. 701-708.

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

Full-duplex radio technology for simultaneously detecting and preventing improvised explosive device activation. / Riihonen, Taneli; Korpi, Dani; Turunen, Matias; Valkama, Mikko.

2018 International Conference on Military Communications and Information Systems, ICMCIS 2018. IEEE, 2018. p. 1-4. Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

Sample-based regularization for support vector machine classification. / Tran, Dat Thanh; Waris, Muhammad Adeel; Gabbouj, Moncef; Iosifidis, Alexandras.

Proceedings of the 7th International Conference on Image Processing Theory, Tools and Applications, IPTA 2017. IEEE, 2018. p. 1-6.

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

Subaperture image segmentation for lossless compression. / Schiopu, Ionut; Gabbouj, Moncef; Iosifidis, Alexandras; Zeng, Bing; Liu, Shuaicheng.

Proceedings of the 7th International Conference on Image Processing Theory, Tools and Applications, IPTA 2017. IEEE, 2018. p. 1-6.

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

Deep multiresolution color constancy. / Aytekin, Caglar; Nikkanen, Jarno; Gabbouj, Moncef.

2017 IEEE International Conference on Image Processing, ICIP 2017 - Proceedings. IEEE COMPUTER SOCIETY PRESS, 2018. p. 3735-3739.

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

360-Degree video streaming and its subjective quality. / Curcio, Igor D.D.; Toukomaa, Henri; Naik, Deepa. SMPTE 2017 Annual Technical Conference and Exhibition, SMPTE 2017. SMPTE, 2018. p. 1-23.
Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Model-based dynamic scheduling for multicore implementation of image processing systems. / Wu, Jiahao; Blattner, Timothy; Keyrouz, Walid; Bhattacharyya, Shuvra S. 2017 IEEE International Workshop on Signal Processing Systems, SiPS 2017. IEEE, 2017. 8110003.
Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

An optimized embedded target detection system using acoustic and seismic sensors. / Lee, Kyunghun; Riggan, Benjamin S.; Bhattacharyya, Shuvra S. 25th European Signal Processing Conference, EUSIPCO 2017. IEEE, 2017. p. 986-990.
Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Full search equivalent fast block matching using orthonormal tree-structured haar transform. / Ito, Izumi; Egiazarian, Karen ISPA 2017 - 10th International Symposium on Image and Signal Processing and Analysis. IEEE COMPUTER SOCIETY PRESS, 2017. p. 177-182.
Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Lossless compression of high resolution disparity map images. / Astola, Pekka; Tabus, Ioan. ISSCS 2017 - International Symposium on Signals, Circuits and Systems. IEEE, 2017.
Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Convergence analysis of error-reduction algorithm for solving of the extended one-dimensional discrete phase retrieval problem. / Rusu, Cornelius; Astola, Jaakko. ISSCS 2017 - International Symposium on Signals, Circuits and Systems. IEEE, 2017.
Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Angular wall loss model and Extended Building Penetration model for outdoor to indoor propagation. / Sheikh, Muhammad Usman; Hiltunen, Kimmo; Lempäinen, Jukka. 2017 13th International Wireless Communications and Mobile Computing Conference, IWCMC 2017. IEEE, 2017. p. 1291-1296.
Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Analysis of multipath propagation for 5G system at higher frequencies in microcellular environment. / Sheikh, Muhammad Usman; Lempäinen, Jukka. 2017 13th International Wireless Communications and Mobile Computing Conference, IWCMC 2017. IEEE, 2017. p. 1660-1664.
Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Reduced-complexity digital predistortion for massive MIMO. / Abdelaziz, Mahmoud; Anttila, Lauri; Valkama, Mikko. 2017 IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2017 - Proceedings. IEEE, 2017. p. 6478-6482.
Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

A k-nearest neighbor multilabel ranking algorithm with application to content-based image retrieval. / Zhang, Honglei; Kiranyaz, Serkan; Gabbouj, Moncef. 2017 IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2017 - Proceedings. IEEE, 2017. p. 2587-2591.
Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Inband full-duplex radio access system with self-backhauling : Transmit power minimization under QOS requirements. / Korpi, Dani; Riihonen, Taneli; Valkama, Mikko. 2017 IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2017 - Proceedings. IEEE, 2017. p. 6558-6562.

An accumulative fusion architecture for discriminating people and vehicles using acoustic and seismic signals. / Lee, Kyunghun; Riggan, Benjamin S.; Bhattacharyya, Shuvra S.

2017 IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2017 - Proceedings. IEEE, 2017. p. 2976-2980.

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

The variation of air and surface temperatures in London within a 1km grid using vehicle-transect and ASTER data. / Dos Santos, Rochelle Schneider; Taylor, Jonathon; Davies, Michael; Mavrogianni, Anna; Milner, James.

2017 Joint Urban Remote Sensing Event, JURSE 2017. Institute of Electrical and Electronics Engineers Inc., 2017. 7924613 (2017 Joint Urban Remote Sensing Event, JURSE 2017).

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

The Effect of Light Field Reconstruction and Angular Resolution Reduction on the Quality of Experience. / Kara, Peter A.; Kovacs, Peter T.; Vagharshakyan, Suren; Martini, Maria G.; Barsi, Attila; Balogh, Tibor; Chuchvara, Aleksandra; Chehaibi, Ahmed.

2016 12th International Conference on Signal-Image Technology & Internet-Based Systems (SITIS). IEEE, 2017. p. 781-786.

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

HEVC-compliant viewport-adaptive streaming of stereoscopic panoramic video. / Zare, Alireza; Sreedhar, Kashyap Kammachi; Vadakital, Vinod Kumar Malamal; Aminlou, Alireza; Hannuksela, Miska M.; Gabbouj, Moncef.

2016 Picture Coding Symposium, PCS 2016. IEEE, 2017.

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

Compact modeling and management of reconfiguration in digital channelizer implementation. / Sapiro, Adrian E.; Wolf, Marilyn; Bhattacharyya, Shuvra S.

2016 IEEE Global Conference on Signal and Information Processing, GlobalSIP 2016 - Proceedings. IEEE, 2017. p. 595-599.

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

Advanced architectures for self-interference cancellation in full-duplex radios : Algorithms and measurements. / Korpi, Dani; Aghababaeefreshi, Mona; Piilila, Mauno; Anttila, Lauri; Valkama, Mikko.

2016 50th Asilomar Conference on Signals, Systems and Computers. IEEE, 2017. p. 1553-1557.

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

Low power design methodology for signal processing systems using lightweight dataflow techniques. / Li, Lin; Fanni, Tiziana; Viitanen, Timo; Xie, Renjie; Palumbo, Francesca; Raffo, Luigi; Huttunen, Heikki; Takala, Jarmo; Bhattacharyya, Shuvra S.

DASIP 2016 - Proceedings of the 2016 Conference on Design and Architectures for Signal and Image Processing. IEEE COMPUTER SOCIETY PRESS, 2017. p. 82-89.

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

Color-distribution similarity by information theoretic divergence for color images. / Murayama, Mizuki; Oguro, Daisuke; Kikuchi, Hisakazu; Huttunen, Heikki; Ho, Yo Sung; Shin, Jaeho.

2016 Asia-Pacific Signal and Information Processing Association Annual Summit and Conference, APSIPA 2016. IEEE, 2017.

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

Models of architecture : Reproducible efficiency evaluation for signal processing systems. / Pelcat, Maxime; Desnos, Karol; Maggiani, Luca; Liu, Yanzhou; Heulot, Julien; Nezan, Jean François; Bhattacharyya, Shuvra S.

IEEE International Workshop on Signal Processing Systems, SiPS 2016. IEEE, 2016. p. 121-126 7780083 (IEEE International Workshop on Signal Processing Systems).

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

Improved image quality in fast inpainting with omnidirectional filling. / Hirvola, Ossi; Viitanen, Timo; Sintunata, Vicky; Aoki, Terumasa.

International Conference on Image, Vision and Computing (ICIVC). IEEE, 2016. p. 31-35.

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

Automatic objective thresholding to detect neuronal action potentials. / Tanskanen, Jarno M.A.; Kapucu, Fikret E.; Välkki, Inkeri; Hyttinen, Jari A.K.

Proceedings of 2016 24th European Signal Processing Conference (EUSIPCO). 2016. p. 662-666.

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

Supervised subspace learning based on deep randomized networks. / Iosifidis, Alexandros; Gabbouj, Moncef.

2016 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP) . The Institute of Electrical and Electronics Engineers, Inc., 2016. p. 2584-2588.

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

On Renyi's entropy estimation with one-dimensional Gaussian kernels. / Sarbu, Septimia.

2016 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP) . IEEE, 2016. p. 4408-4412.

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

Blind sub-Nyquist GNSS signal detection. / Daniel, Ondrej; Raasakka, Jussi; Peltola, Pekka; Fröhle, Markus; Rivero-Rodriguez, Alejandro; Wymeersch, Henk; Nurmi, Jari.

2016 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP) . IEEE, 2016. p. 6575-6579.

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

Coordinating proactive social devices in a mobile cloud : Lessons learned and a way forward. / Mäkitalo, Niko; Aaltonen, Timo; Mikkonen, Tommi.

MOBILESoft '16 Proceedings of the International Conference on Mobile Software Engineering and Systems . ACM, 2016. p. 179-188.

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

On prediction of DCT-based denoising efficiency under spatially correlated noise conditions. / Rubel, Oleksii; Lukin, Vladimir; Egiazarian, Karen.

2016 13th International Conference on Modern Problems of Radio Engineering, Telecommunications and Computer Science (TCSET) . IEEE, 2016. p. 750-754.

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

BL-LDA : Bringing bigram to supervised topic model. / Park, Youngsun; Alam, Md Hijbul; Ryu, Woo Jong; Lee, Sangkeun.

Proceedings - 2015 International Conference on Computational Science and Computational Intelligence, CSCI 2015. Institute of Electrical and Electronics Engineers Inc., 2016. p. 83-88 7424068.

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

Random Value Impulse Noise Removal Based on Most Similar Neighbors. / Habib, Muhammad; Rasheed, Saqib; Hussain, Ayyaz; Ali, Mubashir.

2015 13th International Conference on Frontiers of Information Technology (FIT) . IEEE, 2016. p. 329-333.

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

Digital full-band linearization of wideband direct-conversion receiver for radar and communications applications. / Allen, Markus; Marttila, Jaakkko; Valkama, Mikko; Singh, Simran; Epp, Michael; Schlecker, Wolfgang.

2015 49th Asilomar Conference on Signals, Systems and Computers . IEEE COMPUTER SOCIETY PRESS, 2016. p. 1361-1368.

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

Innovative e-Tourism Services on Top of Geo2Tag LBS Platform. / Balandina, Ekaterina; Balandin, Sergey; Koucheryavy, Yevgeni; Mouromtsev, Dmitry.

Proceedings - 11th International Conference on Signal-Image Technology and Internet-Based Systems, SITIS 2015. IEEE, 2016. p. 752-759.

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

Accurate depth estimation from a sequence of monocular images supported by proprioceptive sensors. / Davidson, P.; Raunio, J. P.; Piché, R.

23rd Saint Petersburg International Conference on Integrated Navigation Systems, ICINS 2016 - Proceedings. State Research Center of the Russian Federation, 2016. p. 249-257.

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

Computer vision aided navigation systems. / Davidson, P.; Merkulova, I.

23rd Saint Petersburg International Conference on Integrated Navigation Systems, ICINS 2016 - Proceedings. State Research Center of the Russian Federation, 2016. p. 560-562.

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

OpenCL Programmable Exposed Datapath High Performance Low-Power Image Signal Processor. / Multanen, Joonas; Kultala, Heikki; Koskela, Matias; Viitanen, Timo; Jääskeläinen, Pekka; Takala, Jarmo; Danielyan, Aram; Cruz, Cristóvão. 2016 IEEE Nordic Circuits and Systems Conference (NORCAS). IEEE, 2016.

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

BM3D image denoising using heterogeneous computing platforms. / Sarjanoja, Sampsaa; Boutellier, Jani; Hannuksela, Jari.

DASIP 2015 - Proceedings of the 2015 Conference on Design and Architectures for Signal and Image Processing. Vol. 2015-December IEEE COMPUTER SOCIETY PRESS, 2015. 7367257.

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

Whole-cell morphological properties of neurons constrain the nonrandom features of network connectivity. / Acimovic, Jugoslava; Mäki-Marttunen, Tuomo Mikael; Linne, Marja-Leena.

24th Annual Computational Neuroscience Meeting: CNS*2015. ed. / Gennady Cymbalyuk; Anthony Burkitt. Vol. 16 (Suppl 1) Prague : BioMed Central, 2015. p. P:O7 O7.

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

Programming graphics processing units in the RVC-CAL dataflow language. / Boutellier, J.; Nyländén, T.

Electronic Proceedings of the 2015 IEEE International Workshop on Signal Processing Systems, SiPS 2015. Vol. 2015-December Institute of Electrical and Electronics Engineers Inc., 2015. 7344994.

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

Cosparse dictionary learning for the orthogonal case. / Irofti, Paul; Dumitrescu, Bogdan.

2015 19th International Conference on System Theory, Control and Computing, ICSTCC 2015 - Joint Conference SINTES 19, SACCS 15, SIMSIS 19. IEEE, 2015. p. 343-347.

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

The effect of region of interest size on textural parameters. / Sikiö, Minna; Holli-Helenius, Kirsi K.; Ryymin, Pertti; Dastidar, Prasun; Eskola, Hannu; Harrison, Lara.

2015 9th International Symposium on Image and Signal Processing and Analysis (ISPA) . IEEE, 2015. p. 149-153.

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

MOBILE3DTV : Content delivery optimization over DVB-H system. / Akar, Gozde B.; Gotchev, Atanas.

SMPTE International Conference on Stereoscopic 3D for Media and Entertainment. SMPTE, 2015.

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

The extended one-dimensional discrete phase retrieval problem. / Rusu, Cornelius; Astola, Jaakko.

2015 International Symposium on Signals, Circuits and Systems (ISSCS). IEEE, 2015.

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

Enhancing class discrimination in Kernel Discriminant Analysis. / Iosifidis, Alexandros; Tefas, Anastasios; Pitas, Ioannis.

ICASSP, IEEE International Conference on Acoustics, Speech and Signal Processing - Proceedings. The Institute of Electrical and Electronics Engineers, Inc., 2015. p. 1926-1930 7178306.

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

Exploiting subclass information in one-class support vector machine for video summarization. / Mygdalis, Vasileios; Iosifidis, Alexandros; Tefas, Anastasios; Pitas, Ioannis.
ICASSP, IEEE International Conference on Acoustics, Speech and Signal Processing - Proceedings. Vol. 2015-August
The Institute of Electrical and Electronics Engineers, Inc., 2015. p. 2259-2263.
Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Low-complexity robust DOA estimation. / Dumitrescu, Bogdan; Rusu, Cristian; Tabus, Ioan; Astola, Jaakko.
ICASSP, IEEE International Conference on Acoustics, Speech and Signal Processing - Proceedings. The Institute of
Electrical and Electronics Engineers, Inc., 2015. p. 2794-2798.
Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Similarity induced group sparsity for non-negative matrix factorisation. / Hurmala, Antti; Saeidi, Rahim; Virtanen,
Tuomas.
ICASSP, IEEE International Conference on Acoustics, Speech and Signal Processing - Proceedings. The Institute of
Electrical and Electronics Engineers, Inc., 2015. p. 4425-4429.
Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Collaborative filtering based on group coordinates for smoothing and directional sharpening. / Azzari, Lucio; Foi,
Alessandro.
ICASSP, IEEE International Conference on Acoustics, Speech and Signal Processing - Proceedings. IEEE, 2015. p.
1573-1577.
Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Exemplar-based speech enhancement for deep neural network based automatic speech recognition. / Baby, Deepak;
Gemmeke, Jort F.; Virtanen, Tuomas; Van Hamme, Hugo.
ICASSP, IEEE International Conference on Acoustics, Speech and Signal Processing - Proceedings. The Institute of
Electrical and Electronics Engineers, Inc., 2015. p. 4485-4489.
Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

**Low-Latency Sound-Source-Separation using Non-Negative Matrix Factorisation with Coupled Analysis and Synthesis
Dictionaries.** / Barker, Thomas; Virtanen, Tuomas; Pontoppidan, Niels Henrik.
2015 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP). IEEE, 2015. p. 241-245.
Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Ambient energy harvesting from a two-way talk radio for flexible wearable devices utilizing inkjet printing masking. / Bito,
Jo; Hester, Jimmy G.; Tentzeris, Manos M.
2015 IEEE MTT-S International Microwave Symposium, IMS 2015. Institute of Electrical and Electronics Engineers Inc.,
2015. 7167079.
Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

**A flexible hybrid printed RF energy harvester utilizing catalyst-based copper printing technologies for far-field RF energy
harvesting applications.** / Kim, Sangkil; Bito, Jo; Jeong, Soyeon; Georgiadis, Apostolos; Tentzeris, Manos M.
2015 IEEE MTT-S International Microwave Symposium, IMS 2015. Institute of Electrical and Electronics Engineers Inc.,
2015. 7166723.
Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

3D/inkjet-printed origami antennas for multi-direction RF harvesting. / Kimionis, John; Georgiadis, Apostolos; Isakov,
Michael; Qi, Hang J.; Tentzeris, Manos M.
2015 IEEE MTT-S International Microwave Symposium, IMS 2015. Institute of Electrical and Electronics Engineers Inc.,
2015. 7166878.
Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

**Additively manufactured multilayer high performance RF passive components on cellulose substrates for internet-of-things
electronic circuits.** / Mariotti, Chiara; Cook, Benjamin S.; Alimenti, Federico; Roselli, Luca; Tentzeris, Manos M.
2015 IEEE MTT-S International Microwave Symposium, IMS 2015. Institute of Electrical and Electronics Engineers Inc.,
2015. 7166924.

Lossy-to-lossless progressive coding of depth-maps. / Schiopu, Ionut; Tabus, Ioan.

International Symposium on Signals, Circuits and Systems (ISSCS). Iasi, Romania, 2015. p. 1 - 4.

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

Partial expansion of dataflow graphs for resource-aware scheduling of multicore signal processing systems. / Zaki, George; Plishker, William; Bhattacharyya, Shuvra S.; Fruth, Frank.

Conference Record of the 48th Asilomar Conference on Signals, Systems and Computers. Vol. 2015-April IEEE COMPUTER SOCIETY PRESS, 2015. p. 385-392 7094469.

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

Lossless compression of regions-of-interest from retinal images. / Hukkanen, Jenni; Astola, Pekka; Tabus, Ioan.

EUVIP 2014 - 5th European Workshop on Visual Information Processing. The Institute of Electrical and Electronics Engineers, Inc., 2015.

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

Classification of iPSC colony images using hierarchical strategies with support vector machines. / Joutsijoki, Henry; Rasku, Jyrki; Haponen, Markus; Baldin, Ivan; Gizatdinova, Yulia; Paci, Michelangelo; Saarikoski, Jyri; Varpa, Kirsi; Siirtola, Harri; Ávalos-Salguero, Jorge; Ilтанен, Кати; Laurikkala, Jorma; Penttinen, Kirsi; Hyttinen, Jari; Aalto-Setälä, Katriina; Juhola, Martti.

IEEE SSCI 2014 - 2014 IEEE Symposium Series on Computational Intelligence - CIDM 2014: 2014 IEEE Symposium on Computational Intelligence and Data Mining, Proceedings. The Institute of Electrical and Electronics Engineers, Inc., 2015. p. 86-92 7008152.

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

Human action recognition in stereoscopic videos based on bag of features and disparity pyramids. / Iosifidis, Alexandros; Tefas, Anastasios; Nikolaidis, Nikos; Pitas, Ioannis.

European Signal Processing Conference. European Signal Processing Conference, EUSIPCO, 2014. p. 1317-1321.

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

GPU parallel implementation of the approximate K-SVD algorithm using OpenCL. / Irofti, Paul; Dumitrescu, Bogdan.

2014 Proceedings of the 22nd European Signal Processing Conference (EUSIPCO). European Signal Processing Conference, EUSIPCO, 2014. p. 271-275.

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

Radar micro-Doppler feature extraction using the Singular Value Decomposition. / De Wit, J. J M; Harmanny, R. I A; Molchanov, P.

2014 International Radar Conference, Radar 2014. The Institute of Electrical and Electronics Engineers, Inc., 2014.

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

Compressed video quality assessment with modified MSE. / Hu, Sudeng; Jin, Lina; Kuo, C.-C. Jay.

2014 Asia-Pacific Signal and Information Processing Association Annual Summit and Conference, APSIPA 2014. The Institute of Electrical and Electronics Engineers, Inc., 2014.

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

Just-in-time scheduling techniques for multicore signal processing systems. / Heulot, Julien; Pelcat, Maxime; Nezan, Jean Francois; Oliva, Yaset; Aridhi, Slaheddine; Bhattacharyya, Shuvra S.

2014 IEEE Global Conference on Signal and Information Processing, GlobalSIP 2014. Institute of Electrical and Electronics Engineers Inc., 2014. p. 25-29 7032071.

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

Data flow algorithms for processors with vector extensions : Handling actors with internal state. / Barford, Lee; Bhattacharyya, Shuvra S.; Liu, Yanzhou.

2014 IEEE Global Conference on Signal and Information Processing, GlobalSIP 2014. Institute of Electrical and Electronics Engineers Inc., 2014. p. 20-24 7032070.

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

Dynamic, data-driven spectrum management in cognitive small cell networks. / Lee, Chang Shen; Chen, Wei Chong; Bhattacharyya, Shuvra S.; Lee, Ta Sung.

2014, 8th International Conference on Signal Processing and Communication Systems, ICSPCS 2014 - Proceedings. Institute of Electrical and Electronics Engineers Inc., 2014. 7021121.

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

The lord of the sense : A privacy preserving reputation system for participatory sensing applications. / Michalas, Antonis; Komninos, Nikos.

2014 IEEE Symposium on Computers and Communications, ISCC 2014 - Proceedings. Institute of Electrical and Electronics Engineers Inc., 2014. 6912480.

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

On application of rational Discrete Short Time Fourier Transform in epileptic seizure classification. / Kovács, Peter; Samiee, Kaveh; Gabbouj, Moncef.

2014 IEEE International Conference on Acoustics, Speech and Signal processing (ICASSP), May 4-9 2014, Florence, Italy. Piscataway : IEEE, 2014. p. 5839-5843 6854723 (IEEE International Conference on Acoustics, Speech and Signal Processing).

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

An Unsupervised Audio Segmentation Method Using Bayesian Information Criterion. / Ozan, Ezgi Can; Tankiz, Seda; Acar, Banu Oskay; Ciloglu, Tolga.

6th International Symposium on Communications, Control & Signal Processing, ISCCSP, 21-23.5.2014, Athens, Greece. NEW YORK : IEEE, 2014. p. 640-643.

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

Minimum Variance Extreme Learning Machine for human action recognition. / Iosifidis, Alexandros; Tefas, Anastasios; Pitas, Ioannis.

ICASSP, IEEE International Conference on Acoustics, Speech and Signal Processing - Proceedings. The Institute of Electrical and Electronics Engineers, Inc., 2014. p. 5427-5431 6854640.

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

Impact of received signal on self-interference channel estimation and achievable rates in in-band full-duplex transceivers. / Korpi, Dani; Anttila, Lauri; Valkama, Mikko.

2014 48th Asilomar Conference on Signals, Systems and Computers. IEEE COMPUTER SOCIETY PRESS, 2014. p. 975-982.

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

Programmable lowpower implementation of the HEVC Adaptive Loop Filter. / Hautala, Ilkka; Boutellier, Jani; Hannuksela, Jari.

2013 IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2013 - Proceedings. 2013. p. 2664-2668 6638139.

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

Configurable, resource-optimized FFT architecture for OFDM communication. / Cho, Inkeun; Shen, Chung Ching; Tachwali, Yahia; Hsu, Chia Jui; Bhattacharyya, Shuvra S.

2013 IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2013 - Proceedings. 2013. p. 2746-2750 6638156.

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

On the effect of network structure and synaptic mechanisms on sustained bursting activity. / Mäki-Marttunen, Tuomo Mikael; Acimovic, Jugoslava; Ruohonen, Keijo Pellervo; Linne, Marja-Leena.

Twenty Second Annual Computational Neuroscience Meeting: CNS*2013. ed. / Gennady Cymbalyuk; Astrid Prinz. Vol. Volume 14 Suppl 1 Paris, France : BioMed Central, 2013. p. P247.

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

Rate-distortion based reversible watermarking for JPEG images with quality factors selection. / Efimushkina, T.; Egiazarian, K.; Gabbouj, M.
2013 4th European Workshop on Visual Information Processing, EUVIP 2013, Paris, France, 10.-12.2013. University of Paris 13, 2013. p. 94-99 6623958 (European Workshop on Visual Information Processing).
Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Multi-view human action recognition: A survey. / Iosifidis, Alexandros; Tefas, Anastasios; Pitas, Ioannis.
Proceedings - 2013 9th International Conference on Intelligent Information Hiding and Multimedia Signal Processing, IIH-MSP 2013. IEEE COMPUTER SOCIETY PRESS, 2013. p. 522-525.
Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Representative class vector clustering-based discriminant analysis. / Iosifidis, Alexandros; Tefas, Anastasios; Pitas, Ioannis.
Proceedings - 2013 9th International Conference on Intelligent Information Hiding and Multimedia Signal Processing, IIH-MSP 2013. IEEE COMPUTER SOCIETY PRESS, 2013. p. 526-529.
Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Dynamic action classification based on iterative data selection and Feedforward Neural networks. / Iosifidis, Alexandros; Tefas, Anastasios; Pitas, Ioannis.
European Signal Processing Conference. European Signal Processing Conference, EUSIPCO, 2013. 6811572.
Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Multiplicative update for fast optimization of information retrieval based neighbor embedding. / Peltonen, Jaakko; Lin, Ziyuan.
2013 IEEE International Workshop on Machine Learning for Signal Processing - Proceedings of MLSP 2013. 2013. 6661899.
Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

An image guided treatment platform for prostate cancer photodynamic therapy. / Betrouni, N.; Colin, P.; Puech, P.; Villers, A.; Mordon, S.
2013 35th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, EMBC 2013. 2013. p. 370-373 6609514.
Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

DBComposer : An R package for integrative analysis and management of gene expression microarray data. / Kong, Lingjia; Aho, Kaisa Leena; Granberg, Kirsi; Roos, Christophe; Autio, Reija.
2013 IEEE International Workshop on Genomic Signal Processing and Statistics, GENSiPS 2013 - Proceedings. 2013. p. 92-93 6735944.
Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

An efficient GPU implementation of an arbitrary resampling polyphase channelizer. / Kim, Scott C.; Plishker, William L.; Bhattacharyya, Shuvra S.
DASIP 2013 - Proceedings of the 2013 Conference on Design and Architectures for Signal and Image Processing. 2013. p. 231-238 6661548.
Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Design space exploration and implementation of RVC-CAL applications using the TURNUS framework. / Casale-Brunet, S.; Bezati, E.; Alberti, C.; Roquier, G.; Mattavelli, M.; Janneck, J. W.; Boutellier, J.
DASIP 2013 - Proceedings of the 2013 Conference on Design and Architectures for Signal and Image Processing. 2013. p. 341-342 6661566.
Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

High-performance programs by source-level merging of RVC-CAL dataflow actors. / Boutellier, J.; Ghazi, A.; Silvén, O.; Ersfolk, J.
2013 IEEE Workshop on Signal Processing Systems, SiPS 2013. Institute of Electrical and Electronics Engineers Inc., 2013. p. 360-365 6674533.
Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Parameterized core functional dataflow graphs and their application to design and implementation of wireless communication systems. / Wang, Lai Huei; Shen, Chung Ching; Bhattacharyya, Shuvra S. 2013 IEEE Workshop on Signal Processing Systems, SiPS 2013. Institute of Electrical and Electronics Engineers Inc., 2013. p. 1-6 6674471.

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

A system-level design approach for dynamic resource coordination and energy optimization in sensor network platforms. / Cho, Inkeun; Sudusinghe, Kishan; Shen, Chung Ching; McGee, Jonathan; Bhattacharyya, Shuvra. Conference Record of the 47th Asilomar Conference on Signals, Systems and Computers. IEEE COMPUTER SOCIETY PRESS, 2013. p. 1436-1441 6810533.

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

Programmable implementation of zero-crossing demodulator on an application specific processor. / Ghazi, Amanullah; Boutellier, Jani; Hannuksela, Jari; Shahabuddin, Shahriar; Silvén, Olli. 2013 IEEE Workshop on Signal Processing Systems, SiPS 2013. Institute of Electrical and Electronics Engineers Inc., 2013. p. 231-236 6674510.

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

Efficient optimization for data visualization as an information retrieval task. / Peltonen, Jaakko; Georgatzis, Konstantinos. 2012 IEEE International Workshop on Machine Learning for Signal Processing - Proceedings of MLSP 2012. 2012. 6349797.

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

Multidimensional dataflow graph modeling and mapping for efficient GPU implementation. / Wang, Lai Huei; Shen, Chung Ching; Seetharaman, Gunasekaran; Palaniappan, Kannappan; Bhattacharyya, Shuvra S. Proceedings - 2012 IEEE Workshop on Signal Processing Systems, SiPS 2012. 2012. p. 300-305 6363272.

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

Application-specific instruction processor for extracting local binary patterns. / Boutellier, Jani; Lundbom, Ismo; Janhunen, Janne; Ylimainen, Jori; Hannuksela, Jari. DASIP 2012 - Proceedings of the 2012 Conference on Design and Architectures for Signal and Image Processing. 2012. p. 82-89 6385363.

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

Systematic integration of flowgraph- and module-level parallelism in implementation of DSP applications on multiprocessor systems-on-chip. / Zhou, Zheng; Shen, Chung Ching; Plishker, William; Wu, Hsiang Huang; Bhattacharyya, Shuvra S. ICSP 2012 - 2012 11th International Conference on Signal Processing, Proceedings. Vol. 1 2012. p. 402-408 6491686.

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

GPU-based acceleration of symbol timing recovery. / Kim, Scott C.; Plishker, William L.; Bhattacharyya, Shuvra S.; Cavallaro, Joseph R. DASIP 2012 - Proceedings of the 2012 Conference on Design and Architectures for Signal and Image Processing. 2012. p. 273-280 6385393.

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

NT-SIM : A co-simulator for networked signal processing applications. / Won, Stephen; Shen, Chung Ching; Bhattacharyya, Shuvra S.

Proceedings of the 20th European Signal Processing Conference, EUSIPCO 2012. 2012. p. 1094-1098 6334198.

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

Parameterized scheduling for signal processing systems using topological patterns. / Wu, Shenpei; Shen, Chung Ching; Sane, Nimish; Davis, Kelly; Bhattacharyya, Shuvra S. 2012 IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2012 - Proceedings. 2012. p. 1561-1564 6288190.

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

Emergence of global and local structural features during development of neuronal networks. / Acimovic, Jugoslava. Proceedings of the Eighth International Workshop on Computational Systems Biology, WCSB 2011, June 6-8, 2011, Zürich, Switzerland . Tampere : TICSP, 2011. (TICSP Series ; Vol. 57). Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Effects of structure on spontaneous activity in simulated neuronal networks. / Mäki-Marttunen, Tuomo; Acimovic, Jugoslava; Ruohonen, Keijo; Linne, Marja-Leena. Proceedings of Mathematical Neuroscience (ICMS 2011), April 11-13, 2011, Edinburgh, Scotland. 2011. Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Automatic synthesis of TTA processor networks from RVC-CAL dataflow programs. / Boutellier, J.; Silvén, O.; Raulet, M. 2011 IEEE Workshop on Signal Processing Systems, SiPS 2011, Proceedings. 2011. p. 25-30 6088944. Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Vectorization and mapping of software defined radio applications on heterogeneous multi-processor platforms. / Zaki, George F.; Plishker, William; Bhattacharyya, Shuvra S.; Clancy, Charles; Kuykendall, John. 2011 IEEE Workshop on Signal Processing Systems, SiPS 2011, Proceedings. 2011. p. 31-36 6088945. Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Blind estimation of mixed noise parameters in images using robust regression curve fitting. / Zabrodina, Victoria; Abramov, Sergey; Lukin, Vladimir; Astola, Jaakko; Vozel, Benoit; Chehdi, Kacem. European Signal Processing Conference. 2011. p. 1135-1139. Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Model-based precision analysis and optimization for digital signal processors. / Kedilaya, Soujanya; Plishker, William; Purkovic, Aleksandar; Johnson, Brian; Bhattacharyya, Shuvra S. European Signal Processing Conference. 2011. p. 506-510. Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Modeling and optimization of dynamic signal processing in resource-aware sensor networks. / Bhattacharyya, Shuvra S.; Plishker, William; Sane, Nimish; Shen, Chung Ching; Wu, Hsiang Huang. 2011 8th IEEE International Conference on Advanced Video and Signal Based Surveillance, AVSS 2011. 2011. p. 449-454 6027374. Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Scheduling of CAL actor networks based on dynamic code analysis. / Boutellier, Jani; Silven, Olli; Raulet, Mickael. 2011 IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2011 - Proceedings. 2011. p. 1609-1612 5946805. Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

On delay distribution in IEEE 802.11 wireless networks. / Ivanov, Stepan; Botvich, Dmitri; Balasubramaniam, Sasitharan. 16th IEEE Symposium on Computers and Communications, ISCC'11. 2011. p. 254-256 5983849. Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Computational modeling of growth in cortical cultures using the NETMORPH simulation tool. / Acimovic, Jugoslava; Mäki-Marttunen, Tuomo; Linne, Marja-Leena. Neuroscience 2010, 40th Annual Meeting, San Diego, USA, 13-17 November 2010. 2010. p. 2 p. Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Computational tools for assessing the properties of 2D neural cell cultures. / Acimovic, Jugoslava; Teppola, Heidi; Selinummi, Jyrki Juhani; Linne, Marja-Leena. Eighteenth Annual Computational Neuroscience Meeting: CNS*2009. ed. / Don Johnson. Vol. 10 (Suppl 1) Berlin : BioMed Central, 2009. p. P170 P170. Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

- Modeling and estimation of signal-dependent and correlated noise.** / Azzari, Lucio; Borges, Lucas Rodrigues; Foi, Alessandro.
Denoising of Photographic Images and Video: Fundamentals, Open Challenges and New Trends. SPRINGER-VERLAG LONDON LTD, 2018. p. 1-36 (Advances in Computer Vision and Pattern Recognition).
Research output: Chapter in Book/Report/Conference proceeding > Chapter > Scientific > peer-review
- Data-driven stream mining systems for computer vision.** / Bhattacharyya, Shuvra S.; Van Der Schaar, Mihaela; Atan, Onur; Tekin, Cem; Sudusinghe, Kishan.
Advances in Computer Vision and Pattern Recognition. Vol. 68 SPRINGER-VERLAG LONDON LTD, 2014. p. 249-264 (Advances in Computer Vision and Pattern Recognition; Vol. 68).
Research output: Chapter in Book/Report/Conference proceeding > Chapter > Scientific > peer-review
- Gaussian mixture models for signal mapping and positioning.** / Raitoharju, M.; García-Fernández, F.; Hostettler, R.; Piché, R.; Särkkä, S.
In: Signal Processing, Vol. 168, 107330, 01.03.2020.
Research output: Contribution to journal > Article > Scientific > peer-review
- Fusion enhancement for tracking of respiratory rate through intrinsic mode functions in photoplethysmography.** / Pirhonen, Mikko; Vehkaoja, Antti.
In: Biomedical Signal Processing and Control, Vol. 59, 101887, 2020.
Research output: Contribution to journal > Article > Scientific > peer-review
- Online Spectrogram Inversion for Low-Latency Audio Source Separation.** / Magron, Paul; Virtanen, Tuomas.
In: IEEE Signal Processing Letters, Vol. 27, 2020, p. 306-310.
Research output: Contribution to journal > Article > Scientific > peer-review
- Functional electrical stimulation for facial pacing : Effects of waveforms on movement intensity and ratings of discomfort.** / Ilves, Mirja; Rantanen, Ville; Venesvirta, Hanna; Llykyangas, Jani; Vehkaoja, Antti; Mäkelä, Eeva; Verho, Jarmo; Lekkala, Jukka; Rautainen, Markus; Surakka, Veikko.
In: Biomedical Signal Processing and Control, Vol. 60, 101992, 2020.
Research output: Contribution to journal > Article > Scientific > peer-review
- Compressive sensed video recovery via iterative thresholding with random transforms.** / Belyaev, Evgeny; Codreanu, Marian; Juntti, Markku; Egiazarian, Karen.
In: IET Image Processing, Vol. 14, No. 6, 2020, p. 1187-1200.
Research output: Contribution to journal > Article > Scientific > peer-review
- Vehicle Attribute Recognition by Appearance : Computer Vision Methods for Vehicle Type, Make and Model Classification.** / Ni, Xingyang; Huttunen, Heikki.
In: Journal of Signal Processing Systems, 2020.
Research output: Contribution to journal > Article > Scientific > peer-review
- Digital Predistortion for Multiuser Hybrid MIMO at mmWaves.** / Brihuega, Alberto; Anttila, Lauri; Abdelaziz, Mahmoud; Eriksson, Thomas; Tufvesson, Fredrik; Valkama, Mikko.
In: IEEE Transactions on Signal Processing, Vol. 68, 2020, p. 3603-3618.
Research output: Contribution to journal > Article > Scientific > peer-review
- Multimodal subspace support vector data description.** / Sohrab, Fahad; Raitoharju, Jenni; Iosifidis, Alexandros; Gabbouj, Moncef.
In: Pattern Recognition, Vol. 110, 107648, 2020.
Research output: Contribution to journal > Article > Scientific > peer-review
- Self-Supervised Light Field Reconstruction Using Shearlet Transform and Cycle Consistency.** / Gao, Yuan; Bregovic, Robert; Gotchev, Atanas.
In: IEEE Signal Processing Letters, Vol. 27, 2020, p. 1425-1429.

Research output: Contribution to journal > Article > Scientific > peer-review

Bayesian receiver operating characteristic metric for linear classifiers. / Hassan, Syeda Sakira; Huttunen, Heikki; Niemi, Jari; Tohka, Jussi.

In: Pattern Recognition Letters, Vol. 128, 01.12.2019, p. 52-59.

Research output: Contribution to journal > Article > Scientific > peer-review

Generalization of the K-SVD algorithm for minimization of β -divergence. / Garcia-Molla, Victor M.; San Juan, Pablo; Virtanen, Tuomas; Vidal, Antonio M.; Alonso, Pedro.

In: Digital Signal Processing: A Review Journal, Vol. 92, 01.09.2019, p. 47-53.

Research output: Contribution to journal > Article > Scientific > peer-review

An approval of MPPT based on pv cell's simplified equivalent circuit during fast-shading conditions. / Rajput, Shailendra; Averbukh, Moshe; Yahalom, Asher; Minav, Tatiana.

In: Electronics (Switzerland), Vol. 8, No. 9, 1060, 01.09.2019.

Research output: Contribution to journal > Article > Scientific > peer-review

Performance analysis of single-query 6-DoF camera pose estimation in self-driving setups. / Fu, Junsheng; Pertuz, Said; Matas, Jiri; Kämäräinen, Joni-Kristian.

In: Computer Vision and Image Understanding, Vol. 186, 09.2019, p. 58-73.

Research output: Contribution to journal > Article > Scientific > peer-review

Design and implementation of a multi-sensor newborn EEG seizure and background model with inter-channel field characterization. / Al-Sa'd, Mohammad F.; Boashash, Boualem.

In: Digital Signal Processing: A Review Journal, Vol. 90, 01.07.2019, p. 71-99.

Research output: Contribution to journal > Article > Scientific > peer-review

Socially inspired relaying and proactive mode selection in mmWave vehicular communications. / Moltchanov, Dmitri; Kovalchukov, Roman; Gerasimenko, Mikhail; Andreev, Sergey; Koucheryavy, Yevgeni; Gerla, Mario.

In: IEEE Internet of Things Journal, Vol. 6, No. 3, 01.06.2019, p. 5172-5183.

Research output: Contribution to journal > Article > Scientific > peer-review

Deep Learning for Audio Signal Processing. / Purwins, Hendrik; Li, Bo; Virtanen, Tuomas; Schlüter, Jan; Chang, Shuo Yiin; Sainath, Tara.

In: IEEE Journal on Selected Topics in Signal Processing, Vol. 13, No. 2, 01.05.2019, p. 206-219.

Research output: Contribution to journal > Article > Scientific > peer-review

Convolutional low-resolution fine-grained classification. / Cai, Dingding; Chen, Ke; Qian, Yanlin; Kämäräinen, Joni-Kristian.

In: Pattern Recognition Letters, Vol. 119, 03.2019, p. 166-171.

Research output: Contribution to journal > Article > Scientific > peer-review

ALMARVI System Solution for Image and Video Processing in Healthcare, Surveillance and Mobile Applications. / Al-Ars, Zaid; van der Vlugt, Steven; Jääskeläinen, Pekka; van der Linden, Frank.

In: Journal of Signal Processing Systems, Vol. 91, No. 1, 01.2019, p. 1-7.

Research output: Contribution to journal > Article > Scientific > peer-review

Video coding of dynamic 3D point cloud data. / Schwarz, Sebastian; Sheikhipour, Nahid; Fakour Sevom, Vida; Hannuksela, Miska M.

In: APSIPA Transactions on Signal and Information Processing, 2019.

Research output: Contribution to journal > Article > Scientific > peer-review

Digital Predistortion for 5G Small Cell : GPU Implementation and RF Measurements. / Pascual Campo, Pablo; Lampu, Vesa; Meirhaeghe, Alexandre; Boutellier, Jani; Anttila, Lauri; Valkama, Mikko.

In: Journal of Signal Processing Systems, 2019.

Research output: Contribution to journal > Article > Scientific > peer-review

Cascade of Boolean detector combinations. / Mahkonen, Katariina; Virtanen, Tuomas; Kämäräinen, Joni.

In: *Eurasip Journal on Image and Video Processing*, Vol. 2018, 61, 12.2018.

Research output: Contribution to journal > Article > Scientific > peer-review

Toward Efficient Execution of RVC-CAL Dataflow Programs on Multicore Platforms. / Hautala, Ilkka; Boutellier, Jani; Nylänen, Teemu; Silvén, Olli.

In: *Journal of Signal Processing Systems*, Vol. 90, No. 11, 11.2018, p. 1507-1517.

Research output: Contribution to journal > Article > Scientific > peer-review

Skew-t Filter and Smoother with Improved Covariance Matrix Approximation. / Nurminen, Henri; Ardestiri, Tohid; Piche, Robert; Gustafsson, Fredrik.

In: *IEEE Transactions on Signal Processing*, Vol. 66, No. 21, 11.2018, p. 5618-5633.

Research output: Contribution to journal > Article > Scientific > peer-review

Deep Learning Case Study for Automatic Bird Identification. / Niemi, Juha; Tanttu, Juha.

In: *Applied Sciences (Switzerland)*, Vol. 8, No. 11, 2089, 29.10.2018.

Research output: Contribution to journal > Article > Scientific > peer-review

Benchmark database for fine-grained image classification of benthic macroinvertebrates. / Raitoharju, Jenni; Riabchenko, Ekaterina; Ahmad, Iftikhar; Iosifidis, Alexandros; Gabbouj, Moncef; Kiranyaz, Serkan; Tirronen, Ville; Ärje, Johanna; Kärkkäinen, Salme; Meissner, Kristian.

In: *Image and Vision Computing*, Vol. 78, 01.10.2018, p. 73-83.

Research output: Contribution to journal > Article > Scientific > peer-review

Nonlocality-Reinforced Convolutional Neural Networks for Image Denoising. / Cruz, Cristovao; Foi, Alessandro; Katkovnik, Vladimir; Egiazarian, Karen.

In: *IEEE Signal Processing Letters*, Vol. 25, No. 8, 01.08.2018, p. 1216-1220.

Research output: Contribution to journal > Article > Scientific > peer-review

Summarization of User-Generated Sports Video by Using Deep Action Recognition Features. / Tejero-de-Pablos, Antonio; Nakashima, Yuta; Sato, Tomokazu; Yokoya, Naokazu; Linna, Marko; Rahtu, Esa.

In: *IEEE Transactions on Multimedia*, Vol. 20, No. 8, 08.2018, p. 2000-2011.

Research output: Contribution to journal > Article > Scientific > peer-review

Stabilization to trajectories for parabolic equations. / Phan, Duy; Rodrigues, Sérgio S.

In: *Mathematics of Control, Signals, and Systems*, Vol. 30, No. 2, 11, 01.06.2018.

Research output: Contribution to journal > Article > Scientific > peer-review

Delay-Accuracy Trade-off in Opportunistic Time-of-Arrival Localization. / Daniel, Ondrej; Wymeersch, Henk; Nurmi, Jari.

In: *IEEE Signal Processing Letters*, Vol. 25, No. 6, 06.2018, p. 763-767.

Research output: Contribution to journal > Article > Scientific > peer-review

Digital Predistortion for Hybrid MIMO Transmitters. / Abdelaziz, Mahmoud; Anttila, Lauri; Brihuega, Alberto; Tufvesson, Fredrik; Valkama, Mikko.

In: *IEEE Journal on Selected Topics in Signal Processing*, Vol. 12, No. 3, 06.2018, p. 445-454.

Research output: Contribution to journal > Article > Scientific > peer-review

Analysis of common rail pressure signal of dual-fuel large industrial engine for identification of injection duration of pilot diesel injectors. / Krogerus, Tomi; Hyvönen, Mika; Huhtala, Kalevi.

In: *Fuel*, Vol. 216, 03.2018, p. 1-9.

Research output: Contribution to journal > Article > Scientific > peer-review

Detection and Classification of Acoustic Scenes and Events : Outcome of the DCASE 2016 Challenge. / Mesaros, Annamaria; Heittola, Toni; Benetos, Emmanouil; Foster, Peter; Lagrange, Mathieu; Virtanen, Tuomas; Plumbley, Mark D.

In: *IEEE/ACM Transactions on Audio Speech and Language Processing*, Vol. 26, No. 2, 02.2018, p. 379-393.

Research output: Contribution to journal > Article > Scientific > peer-review

Probabilistic saliency estimation. / Aytekin, Caglar; Iosifidis, Alexandros; Gabbouj, Moncef.
In: Pattern Recognition, Vol. 74, 2018, p. 359-372.

Research output: Contribution to journal > Article > Scientific > peer-review

Separation of Moving Sound Sources Using Multichannel NMF and Acoustic Tracking. / Nikunen, Joonas; Diment, Aleksandr; Virtanen, Tuomas.

In: IEEE/ACM Transactions on Audio Speech and Language Processing, Vol. 26, No. 2, 2018, p. 281-295.

Research output: Contribution to journal > Article > Scientific > peer-review

Damped Posterior Linearization Filter. / Raitoharju, Matti; Svensson, Lennart; Garcia-Fernandez, Angel Froilan; Piche, Robert.

In: IEEE Signal Processing Letters, Vol. 25, No. 4, 2018.

Research output: Contribution to journal > Article > Scientific > peer-review

Estimation and Mitigation of Channel Non-Reciprocity in Massive MIMO. / Raeesi, Orod; Gokceoglu, Ahmet; Valkama, Mikko.

In: IEEE Transactions on Signal Processing, Vol. 66, No. 10, 2018.

Research output: Contribution to journal > Article > Scientific > peer-review

Multi-view predictive latent space learning. / Yuan, Jirui; Gao, Ke; Zhu, Pengfei; Egiazarian, Karen.

In: Pattern Recognition Letters, 2018.

Research output: Contribution to journal > Article > Scientific > peer-review

Model-Based Dynamic Scheduling for Multicore Signal Processing. / Wu, Jiahao; Blattner, Timothy; Keyrouz, Walid; Bhattacharyya, Shuvra S.

In: Journal of Signal Processing Systems, 2018, p. 1-14.

Research output: Contribution to journal > Article > Scientific > peer-review

Sparse approximations in complex domain based on BM3D modeling. / Katkovnik, Vladimir; Ponomarenko, Mykola; Egiazarian, Karen.

In: Signal Processing, Vol. 141, 01.12.2017, p. 96-108.

Research output: Contribution to journal > Article > Scientific > peer-review

Multilinear class-specific discriminant analysis. / Thanh Tran, Dat; Gabbouj, Moncef; Iosifidis, Alexandros.

In: Pattern Recognition Letters, Vol. 100, 01.12.2017, p. 131-136.

Research output: Contribution to journal > Article > Scientific > peer-review

Big Media Data Analysis. / Iosifidis, Alexandros; Tefas, Anastasios; Pitas, Ioannis; Gabbouj, Moncef.

In: Signal Processing: Image Communication, Vol. 59, 01.11.2017, p. 105-108.

Research output: Contribution to journal > Editorial > Scientific > peer-review

Sparse Overcomplete Denoising : Aggregation Versus Global Optimization. / Carrera, Diego; Boracchi, Giacomo; Foi, Alessandro; Wohlberg, Brendt.

In: IEEE Signal Processing Letters, Vol. 24, No. 10, 01.10.2017, p. 1468-1472.

Research output: Contribution to journal > Article > Scientific > peer-review

Binary Non-Negative Matrix Deconvolution for Audio Dictionary Learning. / Drgas, Szymon; Virtanen, Tuomas; Lücke, Jörg; Hurmalainen, Antti.

In: IEEE/ACM Transactions on Audio Speech and Language Processing, Vol. 25, No. 8, 01.08.2017, p. 1644-1656.

Research output: Contribution to journal > Article > Scientific > peer-review

Power Mitigation by Performance Equalization in a Heterogeneous Reconfigurable Multicore Architecture. / Hussain, Waqar; Hoffmann, Henry; Ahonen, Tapani; Nurmi, Jari.

In: Journal of Signal Processing Systems, Vol. 87, No. 3, 06.2017, p. 287-297.

Research output: Contribution to journal > Article > Scientific > peer-review

Sparse phase imaging based on complex domain nonlocal BM3D techniques. / Katkovnik, Vladimir; Egiazarian, Karen.
In: Digital Signal Processing, Vol. 63, 01.04.2017, p. 72-85.

Research output: Contribution to journal > Article > Scientific > peer-review

Neighborhood Matching for Image Retrieval. / González-Díaz, Iván; Birinci, Murat; Díaz-De-María, Fernando; Delp, Edward J.

In: IEEE Transactions on Multimedia, Vol. 19, No. 3, 01.03.2017, p. 544-558.

Research output: Contribution to journal > Article > Scientific > peer-review

State Estimation for a Class of Piecewise Affine State-Space Models. / Rui, Rafael; Ardestiri, Tohid; Nurminen, Henri; Bazanella, Alexandre; Gustafsson, Fredrik.

In: IEEE Signal Processing Letters, Vol. 24, No. 1, 01.2017, p. 61-65.

Research output: Contribution to journal > Article > Scientific > peer-review

Data Flow Algorithms for Processors with Vector Extensions : Handling Actors With Internal State. / Barford, Lee; Bhattacharyya, Shuvra S.; Liu, Yanzhou.

In: Journal of Signal Processing Systems, Vol. 87, No. 1, 2017, p. 21-31.

Research output: Contribution to journal > Article > Scientific > peer-review

On the existence of the solution for one-dimensional discrete phase retrieval problem. / Rusu, Corneliu; Astola, Jaakko.

In: Signal, Image and Video Processing, Vol. 11, No. 2, 2017, p. 195–202.

Research output: Contribution to journal > Article > Scientific > peer-review

Parallel Digital Predistortion Design on Mobile GPU and Embedded Multicore CPU for Mobile Transmitters. / Li, Kaipeng; Ghazi, Amanullah; Tarver, Chance; Boutellier, Jani; Abdelaziz, Mahmoud; Anttila, Lauri; Juntti, Markku; Valkama, Mikko; Cavallaro, Joseph R.

In: Journal of Signal Processing Systems, Vol. 89, No. 3, 2017, p. 417–430.

Research output: Contribution to journal > Article > Scientific > peer-review

Implementation of a Multirate Resampler for Multi-carrier Systems on GPUs. / Kim, Scott C.; Bhattacharyya, Shuvra S.

In: Journal of Signal Processing Systems, Vol. 89, No. 3, 2017, p. 445–455.

Research output: Contribution to journal > Article > Scientific > peer-review

Design Flow for GPU and Multicore Execution of Dynamic Dataflow Programs. / Boutellier, J.; Nylander, T.

In: Journal of Signal Processing Systems, Vol. 89, No. 3, 2017, p. 469–478.

Research output: Contribution to journal > Article > Scientific > peer-review

A Hybrid Task Graph Scheduler for High Performance Image Processing Workflows. / Blattner, Timothy; Keyrouz, Walid; Bhattacharyya, Shuvra S.; Haleem, Milton; Brady, Mary.

In: Journal of Signal Processing Systems, Vol. 89, No. 3, 2017, p. 457–467.

Research output: Contribution to journal > Article > Scientific > peer-review

Minimum description length sparse modeling and region merging for lossless plenoptic image compression. / Helin, Petri; Astola, Pekka; Rao, Bhaskar; Tabus, Ioan.

In: IEEE Journal on Selected Topics in Signal Processing, Vol. 11, No. 7, 2017.

Research output: Contribution to journal > Article > Scientific > peer-review

Data Rate Assessment on L2-L3 CPU Bus and Bus between CPU and RAM in Modern CPUs. / Komar, M. S.

In: Automatic Control and Computer Sciences, Vol. 51, No. 7, 2017, p. 701-708.

Research output: Contribution to journal > Article > Scientific > peer-review

Adaptive tracking of people and vehicles using mobile platforms. / Ben Salem, Haifa; Damarla, Thyagaraju; Sudusinghe, Kishan; Stechele, Walter; Bhattacharyya, Shuvra S.

In: Eurasip Journal on Advances in Signal Processing, Vol. 2016, No. 1, 65, 01.12.2016.

Research output: Contribution to journal > Article > Scientific > peer-review

Generalized Hampel Filters. / Pearson, Ronald K.; Neuvo, Yrjö; Astola, Jaakko; Gabbouj, Moncef.
In: *Eurasip Journal on Advances in Signal Processing*, Vol. 2016, No. 1, 87, 01.12.2016.

Research output: Contribution to journal > Article > Scientific > peer-review

Blind Separation of Audio Mixtures Through Nonnegative Tensor Factorization of Modulation Spectrograms. / Barker, Tom ; Virtanen, Tuomas.

In: *Ieee-Acm transactions on audio speech and language processing*, Vol. 24, No. 12, 01.12.2016, p. 2377-2389.

Research output: Contribution to journal > Article > Scientific > peer-review

Ensembles of dense and dense sampling descriptors for the HEp-2 cells classification problem. / Nanni, Loris; Lumini, Alessandra; dos Santos, Florentino Luciano Caetano; Paci, Michelangelo; Hyttinen, Jari.

In: *Pattern Recognition Letters*, Vol. 82, 15.10.2016, p. 28-35.

Research output: Contribution to journal > Article > Scientific > peer-review

Image interpolation based on non-local geometric similarities and directional gradients. / Zhu, Shuyuan; Zeng, Bing; Zeng, Liaoyuan; Gabbouj, Moncef.

In: *IEEE Transactions on Multimedia*, Vol. 18, No. 9, 01.09.2016, p. 1707-1719.

Research output: Contribution to journal > Article > Scientific > peer-review

A software tool for studying the size and shape of human cardiomyocytes. / Rasku, Jyrki; Ojala, Marisa; Pöllönen, Risto Pekka; Joutsijoki, Henry; Gizatdinova, Yulia; Laurikkala, Jorma; Kartasalo, Kimmo; Aalto-Setälä, Katriina; Juhola, Martti.

In: *Biomedical Signal Processing and Control*, Vol. 30, 01.09.2016, p. 134-139.

Research output: Contribution to journal > Article > Scientific > peer-review

Nyström-based approximate kernel subspace learning. / Iosifidis, Alexandros; Gabbouj, Moncef.

In: *Pattern Recognition*, 09.2016, p. 190-197.

Research output: Contribution to journal > Article > Scientific > peer-review

Compressive Detection of Random Subspace Signals. / Razavi, Alireza; Valkama, Mikko; Cabric, Danijela.

In: *IEEE Transactions on Signal Processing*, Vol. 64, No. 16, 15.08.2016, p. 4166-4179.

Research output: Contribution to journal > Article > Scientific > peer-review

Variance Stabilization for Noisy+Estimate Combination in Iterative Poisson Denoising. / Azzari, Lucio; Foi, Alessandro.

In: *IEEE Signal Processing Letters*, Vol. 23, No. 8, 01.08.2016, p. 1086-1090.

Research output: Contribution to journal > Article > Scientific > peer-review

Optimization of Flexible Filter Banks Based on Fast Convolution. / Yli-Kaakinen, Juha; Renfors, Markku.

In: *Journal of Signal Processing Systems*, Vol. 85, No. 1, 08.2016, p. 101-111.

Research output: Contribution to journal > Article > Scientific > peer-review

Visual Voice Activity Detection in the Wild. / Patrona, Foteini; Iosifidis, Alexandros; Tefas, Anastasios; Nikolaidis, Nikolaos; Pitas, Ioannis.

In: *IEEE Transactions on Multimedia*, Vol. 18, No. 6, 01.06.2016, p. 967-977.

Research output: Contribution to journal > Article > Scientific > peer-review

Rotation Invariant Texture Description Using Symmetric Dense Microblock Difference. / Mehta, Rakesh; Egiazarian, Karen

In: *IEEE Signal Processing Letters*, Vol. 23, No. 6, 01.06.2016, p. 833-837.

Research output: Contribution to journal > Article > Scientific > peer-review

A Wideband Front-End Receiver Implementation on GPUs. / Kim, Scott C.; Bhattacharyya, Shuvra S.

In: *IEEE Transactions on Signal Processing*, Vol. 64, No. 10, 15.05.2016, p. 2602-2612.

Research output: Contribution to journal > Article > Scientific > peer-review

Statistical analysis of interference for nanoscale electromechanical wireless communication at VHF-band. / Lehtomäki, Janne J.; Bicen, A. Ozan; Akyildiz, Ian F.
In: IEEE Transactions on Signal Processing, Vol. 64, No. 8, 15.04.2016, p. 2040-2050.
Research output: Contribution to journal > Article > Scientific > peer-review

Which wavelength is the best for arterial pulse waveform extraction using laser speckle imaging? / Vaz, Pedro; Pereira, Tânia; Figueiras, Edite; Correia, Carlos; Humeau-Heurtier, Anne; Cardoso, João.
In: Biomedical Signal Processing and Control, Vol. 25, 03.2016, p. 188-195.
Research output: Contribution to journal > Article > Scientific > peer-review

Importance of maintenance data quality in extended warranty simulation. / Mahlamäki, Katrine; Niemi, Arto; Jokinen, Juuso; Borgman, Jukka.
In: International Journal of COMADEM, Vol. 19, No. 1, 01.01.2016, p. 3-10.
Research output: Contribution to journal > Article > Scientific > peer-review

Online tests of Kalman filter consistency. / Piché, Robert.
In: International Journal of Adaptive Control and Signal Processing, Vol. 30, No. 1, 2016, p. 115–124.
Research output: Contribution to journal > Article > Scientific > peer-review

Still image/video frame lossy compression providing a desired visual quality. / Zemliachenko, Alexander; Lukin, Vladimir; Ponomarenko, Nikolay; Egiazarian, Karen; Astola, Jaakko.
In: Multidimensional Systems and Signal Processing, Vol. 27, No. 3, 2016, p. 697-718.
Research output: Contribution to journal > Article > Scientific > peer-review

IEEE 802.11ac MIMO Transceiver Baseband Processing on a VLIW Processor. / Aghababaeetafreshi, Mona; Lehtonen, Lasse K.; Levanen, Toni; Valkama, Mikko; Takala, Jarmo.
In: Journal of Signal Processing Systems, 2016.
Research output: Contribution to journal > Article > Scientific > peer-review

Instrumentation-Driven Validation of Dataflow Applications. / Chukhman, Ilya; Jiao, Yang; Salem, Haifa Ben; Bhattacharyya, Shuvra S.
In: Journal of Signal Processing Systems, Vol. 84, No. 3, 2016, p. 383–397.
Research output: Contribution to journal > Article > Scientific > peer-review

Dominant Rotated Local Binary Patterns (DRLBP) for texture classification. / Mehta, Rakesh; Egiazarian, Karen.
In: Pattern Recognition Letters, Vol. 71, 2016, p. 16-22.
Research output: Contribution to journal > Article > Scientific > peer-review

Efficiency of texture image filtering and its prediction. / Rubel, Oleksii; Lukin, Vladimir; Abramov, Sergey; Vozel, Benoit; Egiazarian, Karen; Pogrebnyak, Oleksiy.
In: Signal, Image and Video Processing, Vol. 10, No. 8, 2016, p. 1543–1550.
Research output: Contribution to journal > Article > Scientific > peer-review

Unbiased Injection of Signal-Dependent Noise in Variance-Stabilized Range. / Borges, Lucas; Vieira, Marcelo; Foi, Alessandro.
In: IEEE Signal Processing Letters, Vol. 23, No. 10, 2016, p. 1494-1498.
Research output: Contribution to journal > Article > Scientific > peer-review

Using multi-step proposal distribution for improved MCMC convergence in Bayesian network structure learning. / Larjo, Antti; Lähdesmäki, Harri.
In: Eurasip Journal on Bioinformatics and Systems Biology, Vol. 2015, No. 1, 6, 27.12.2015.
Research output: Contribution to journal > Article > Scientific > peer-review

Energy cooperation for throughput optimization based on save-then-transmit protocol in wireless communication system. /

Dai, Cui-Qin; Li, Fu-Jia; Renfors, Markku.

In: *Eurasip Journal on Wireless Communications and Networking*, Vol. 2015, No. 1, 119, 26.12.2015.

Research output: Contribution to journal > Article > Scientific > peer-review

Generative part-based Gabor object detector. / Riabchenko, Ekaterina; Kämäärinen, Joni-Kristian.

In: *Pattern Recognition Letters*, Vol. 68, No. P1, 15.12.2015, p. 1-8.

Research output: Contribution to journal > Article > Scientific > peer-review

Binomial Gaussian mixture filter. / Raitoharju, Matti; Ali-Löytty, Simo; Piché, Robert.

In: *Eurasip Journal on Advances in Signal Processing*, Vol. 2015, No. 1, 36, 02.12.2015.

Research output: Contribution to journal > Article > Scientific > peer-review

A fast universal self-tuned sampler within Gibbs sampling. / Martino, L.; Yang, H.; Luengo, D.; Kanniainen, J.; Corander, J.

In: *Digital Signal Processing*, Vol. 47, 01.12.2015, p. 68-83.

Research output: Contribution to journal > Article > Scientific > peer-review

Kalman filter with a linear state model for PDR+WLAN positioning and its application to assisting a particle filter. /

Raitoharju, Matti; Nurminen, Henri; Piché, Robert.

In: *Eurasip Journal on Advances in Signal Processing*, Vol. 2015, No. 1, 33, 01.12.2015.

Research output: Contribution to journal > Article > Scientific > peer-review

A New Approach to Sign-Bit-Based Parameter Estimation in OFDM Receivers. / Diaz, Israel; Wilhelmsson, Leif R.;

Sofotasios, Paschalis C.; Miao, Yun; Tan, Siyu; Edfors, Ove; Öwall, Viktor.

In: *Circuits, Systems and Signal Processing*, Vol. 34, No. 11, 23.11.2015, p. 3631-3660.

Research output: Contribution to journal > Article > Scientific > peer-review

Robust Inference for State-Space Models with Skewed Measurement Noise. / Nurminen, Henri; Ardestiri, Tohid; Piché, Robert; Gustafsson, Fredrik.

In: *IEEE Signal Processing Letters*, Vol. 22, No. 11, 01.11.2015, p. 1898-1902.

Research output: Contribution to journal > Article > Scientific > peer-review

Entropy and Channel Capacity under Optimum Power and Rate Adaptation over Generalized Fading Conditions. /

Sofotasios, Paschalis C.; Muhaidat, Sami; Valkama, Mikko; Ghogho, Mounir; Karagiannidis, George K.

In: *IEEE Signal Processing Letters*, Vol. 22, No. 11, 01.11.2015, p. 2162-2166.

Research output: Contribution to journal > Article > Scientific > peer-review

Sparse extreme learning machine classifier exploiting intrinsic graphs. / Iosifidis, Alexandros; Tefas, Anastasios; Pitas, Ioannis.

In: *Pattern Recognition Letters*, Vol. 65, 01.11.2015, p. 192-196.

Research output: Contribution to journal > Article > Scientific > peer-review

Coupled dictionaries for exemplar-based speech enhancement and automatic speech recognition. / Baby, Deepak;

Virtanen, Tuomas; Gemmeke, Jort F.; Van hamme, Hugo.

In: *Ieee-Acm transactions on audio speech and language processing*, Vol. 23, No. 11, 01.11.2015, p. 1788-1799.

Research output: Contribution to journal > Article > Scientific > peer-review

Model selection for linear classifiers using Bayesian error estimation. / Huttunen, Heikki; Tohka, Jussi.

In: *Pattern Recognition*, Vol. 48, No. 11, 11.2015, p. 3739-3748.

Research output: Contribution to journal > Article > Scientific > peer-review

Solutions to integrals involving the marcum Q-function and applications. / Sofotasios, Paschalis C.; Muhaidat, Sami; Karagiannidis, George K.; Sharif, Bayan S.

In: *IEEE Signal Processing Letters*, Vol. 22, No. 10, 01.10.2015, p. 1752-1756.

Research output: Contribution to journal > Article > Scientific > peer-review

Adaptive Randomized Coordinate Descent for Sparse Systems : Lasso and Greedy Algorithms. / Onose, Alexandru; Dumitrescu, Bogdan.

In: IEEE Transactions on Signal Processing, Vol. 63, No. 15, 01.08.2015, p. 4091-4101.
Research output: Contribution to journal > Article > Scientific > peer-review

Adaptive sampling for compressed sensing based image compression. / Zhu, Shuyuan; Zeng, Bing; Gabbouj, Moncef.

In: Journal of Visual Communication and Image Representation, Vol. 30, 01.07.2015, p. 94-105.
Research output: Contribution to journal > Article > Scientific > peer-review

Actor Merging for Dataflow Process Networks. / Boutellier, Jani; Ersfolk, Johan; Lilius, Johan; Mattavelli, Marco; Roquier, Ghislain; Silvén, Olli.

In: IEEE Transactions on Signal Processing, Vol. 63, No. 10, 7055878, 15.05.2015, p. 2496-2508.
Research output: Contribution to journal > Article > Scientific > peer-review

Spectrum Sensing under RF Non-Linearities : Performance Analysis and DSP-Enhanced Receivers. / Rebeiz, Eric; Hagh Ghadam, Ali Shahed; Valkama, Mikko; Cabric, Danijela.

In: IEEE Transactions on Signal Processing, Vol. 63, No. 8, 15.04.2015, p. 1950-1964.
Research output: Contribution to journal > Article > Scientific > peer-review

Multiresolution analysis for compactly supported interpolating tensor product wavelets. / Höynälänmaa, Tommi.

In: International Journal of Wavelets Multiresolution and Information Processing, Vol. 13, No. 2, 1550010, 06.03.2015.
Research output: Contribution to journal > Article > Scientific > peer-review

On the kernel Extreme Learning Machine classifier. / Iosifidis, Alexandros; Tefas, Anastasios; Pitas, Ioannis.

In: Pattern Recognition Letters, Vol. 54, 01.03.2015, p. 11-17.
Research output: Contribution to journal > Article > Scientific > peer-review

Image database TID2013 : Peculiarities, results and perspectives. / Ponomarenko, Nikolay; Jin, Lina; Ieremeiev, Oleg; Lukin, Vladimir; Egiazarian, Karen; Astola, Jaakko; Vozel, Benoit; Chehdi, Kacem; Carli, Marco; Battisti, Federica; Jay Kuo, C. C.

In: Signal Processing: Image Communication, Vol. 30, 01.01.2015, p. 57-77.
Research output: Contribution to journal > Article > Scientific > peer-review

Analytical model in discrete time for cross-layer video communication over LTE. / Efimushkina, T.; Gabbouj, M.; Samuylov, K.

In: Automatic Control and Computer Sciences, Vol. 48, No. 6, 2015, p. 345-357.
Research output: Contribution to journal > Article > Scientific > peer-review

Digital correction of frequency response mismatches in 2-channel time-interleaved ADCs using adaptive I/Q signal processing. / Singh, Simran; Valkama, Mikko; Epp, Michael; Anttila, Lauri; Schlecker, Wolfgang; Ingber, Elmar.

In: Analog Integrated Circuits and Signal Processing, Vol. 82, No. 3, 2015, p. 543-555.
Research output: Contribution to journal > Article > Scientific > peer-review

Subjective evaluation of Super Multi-View compressed contents on high-end light-field 3D displays. / Dricot, Antoine; Jung, Joel; Cagnazzo, Marco; Pesquet, Béatrice; Dufaux, Frédéric; Kovács, Péter; Adhikarla, Vamsi Kiran.

In: Signal Processing: Image Communication, Vol. 39, No. Part B, 2015, p. 369–385.
Research output: Contribution to journal > Article > Scientific > peer-review

Non-negative tensor factorization models for Bayesian audio processing. / Şimşekli, Umut; Virtanen, Tuomas; Cemgil, Ali Taylan.

In: Digital Signal Processing, Vol. 47, 2015, p. 178–191.
Research output: Contribution to journal > Article > Scientific > peer-review

Smart home gateway system over Bluetooth low energy with wireless energy transfer capability. / Galinina, Olga; Mikhaylov, Konstantin; Andreev, Sergey; Turlikov, Andrey; Koucheryavy, Yevgeni.
In: *Eurasip Journal on Wireless Communications and Networking*, Vol. 2015, No. 1, 178, 2015.
Research output: Contribution to journal > Article > Scientific > peer-review

Class-Specific Reference Discriminant Analysis With Application in Human Behavior Analysis. / Iosifidis, Alexandros; Tefas, Anastasios; Pitas, Ioannis.
In: *IEEE Transactions on Human-Machine Systems*, Vol. 45, No. 3, 25.12.2014, p. 315-326.
Research output: Contribution to journal > Article > Scientific > peer-review

Kernel reference discriminant analysis. / Iosifidis, Alexandros; Tefas, Anastasios; Pitas, Ioannis.
In: *Pattern Recognition Letters*, Vol. 49, 01.11.2014, p. 85-91.
Research output: Contribution to journal > Article > Scientific > peer-review

Discriminant Bag of Words based representation for human action recognition. / Iosifidis, Alexandros; Tefas, Anastasios; Pitas, Ioannis.
In: *Pattern Recognition Letters*, Vol. 49, 01.11.2014, p. 185-192.
Research output: Contribution to journal > Article > Scientific > peer-review

Implementation of a high-throughput low-latency polyphase channelizer on GPUs Design and Architectures for Signal and Image Processing 2008. / Kim, Scott C.; Bhattacharyya, Shuvra S.
In: *Eurasip Journal on Advances in Signal Processing*, Vol. 2014, No. 1, 2014.
Research output: Contribution to journal > Article > Scientific > peer-review

Automated design of networks of transport-triggered architecture processors using dynamic dataflow programs. / Yviquel, Hervé; Boutellier, Jani; Raulet, Mickaël; Casseau, Emmanuel.
In: *Signal Processing: Image Communication*, Vol. 28, No. 10, 11.2013, p. 1295-1302.
Research output: Contribution to journal > Article > Scientific > peer-review

Towards generic embedded multiprocessing for RVC-CAL dataflow programs. / Boutellier, Jani; Silvén, Olli.
In: *Journal of Signal Processing Systems*, Vol. 73, No. 2, 11.2013, p. 137-142.
Research output: Contribution to journal > Article > Scientific > peer-review

Passive wireless antenna sensor for strain and crack sensing - Electromagnetic modeling, simulation, and testing. / Yi, Xiaohua; Cho, Chunhee; Cooper, James; Wang, Yang; Tentzeris, Manos M.; Leon, Roberto T.
In: *Smart Materials and Structures*, Vol. 22, No. 8, 085009, 08.2013.
Research output: Contribution to journal > Article > Scientific > peer-review

Multi-view action recognition based on action volumes, fuzzy distances and cluster discriminant analysis. / Iosifidis, Alexandros; Tefas, Anastasios; Pitas, Ioannis.
In: *Signal Processing*, Vol. 93, No. 6, 06.2013, p. 1445-1457.
Research output: Contribution to journal > Article > Scientific > peer-review

Integration of dataflow-based heterogeneous multiprocessor scheduling techniques in GNU radio. / Zaki, George F.; Plishker, William; Bhattacharyya, Shuvra S.; Clancy, Charles; Kuykendall, John.
In: *Journal of Signal Processing Systems*, Vol. 70, No. 2, 02.2013, p. 177-191.
Research output: Contribution to journal > Article > Scientific > peer-review

Dynamic action recognition based on dynemes and Extreme Learning Machine. / Iosifidis, Alexandros; Tefas, Anastasios; Pitas, Ioannis.
In: *Pattern Recognition Letters*, Vol. 34, No. 15, 2013, p. 1890-1898.
Research output: Contribution to journal > Article > Scientific > peer-review

Automatic hierarchical discovery of quasi-static schedules of RVC-CAL dataflow programs. / Boutellier, Jani; Raulet, Mickaël; Silvén, Olli.
In: *Journal of Signal Processing Systems*, Vol. 71, No. 1, 2013, p. 35-40.

Research output: Contribution to journal > Article > Scientific > peer-review

Parameterized scheduling of topological patterns in signal processing dataflow graphs. / Wang, Lai Huei; Shen, Chung Ching; Wu, Shenpei; Bhattacharyya, Shuvra S.

In: *Journal of Signal Processing Systems*, Vol. 71, No. 3, 2013, p. 275-286.

Research output: Contribution to journal > Article > Scientific > peer-review

Design and synthesis for multimedia systems using the targeted dataflow interchange format. / Shen, Chung Ching; Wu, Shenpei; Sane, Nimish; Wu, Hsiang Huang; Plishker, William; Bhattacharyya, Shuvra S.

In: *IEEE Transactions on Multimedia*, Vol. 14, No. 3 PART1, 6172244, 2012, p. 630-640.

Research output: Contribution to journal > Article > Scientific > peer-review

Mapping parameterized cyclo-static dataflow graphs onto configurable hardware. / Kee, Hojin; Shen, Chung Ching; Bhattacharyya, Shuvra S.; Wong, Ian; Rao, Yong; Kornerup, Jacob.

In: *Journal of Signal Processing Systems*, Vol. 66, No. 3, 2012, p. 285-301.

Research output: Contribution to journal > Article > Scientific > peer-review

Overview of the MPEG reconfigurable video coding framework. / Bhattacharyya, Shuvra S.; Eker, Johan; Janneck, Jörn W.; Lucarz, Christophe; Mattavelli, Marco; Raulet, Mickaël.

In: *Journal of Signal Processing Systems*, Vol. 63, No. 2, 05.2011, p. 251-263.

Research output: Contribution to journal > Article > Scientific > peer-review

Quasi-static scheduling of CAL actor networks for reconfigurable video coding. / Boutellier, Jani; Lucarz, Christophe; Lafond, Sébastien; Gomez, Victor Martin; Mattavelli, Marco.

In: *Journal of Signal Processing Systems*, Vol. 63, No. 2, 05.2011, p. 191-202.

Research output: Contribution to journal > Article > Scientific > peer-review

Forward simulation and inverse dipole localization with the lowest order Raviart - Thomas elements for electroencephalography. / Pursiainen, S.; Sorrentino, A.; Campi, C.; Piana, M.

In: *Inverse Problems*, Vol. 27, No. 4, 045003, 04.2011.

Research output: Contribution to journal > Article > Scientific > peer-review

Exploiting statically schedulable regions in dataflow programs. / Gu, Ruirui; Janneck, Jörn W.; Raulet, Mickaël; Bhattacharyya, Shuvra S.

In: *Journal of Signal Processing Systems*, Vol. 63, No. 1, 04.2011, p. 129-142.

Research output: Contribution to journal > Article > Scientific > peer-review

Dimensionality reduction for data visualization. / Kaski, Samuel; Peltonen, Jaakko.

In: *IEEE Signal Processing Magazine*, Vol. 28, No. 2, 5714379, 03.2011, p. 100-104.

Research output: Contribution to journal > Article > Scientific > peer-review

Topological patterns for scalable representation and analysis of dataflow graphs. / Sane, Nimish; Kee, Hojin; Seetharaman, Gunasekaran; Bhattacharyya, Shuvra S.

In: *Journal of Signal Processing Systems*, Vol. 65, No. 2, 2011, p. 229-244.

Research output: Contribution to journal > Article > Scientific > peer-review