

Software architecture design in global software development : An empirical study. / Sievi-Korte, Outi; Richardson, Ita; Beecham, Sarah.

In: Journal of Systems and Software, Vol. 158, 110400, 01.12.2019.

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

Action-Oriented Programming Model : Collective Executions and Interactions in the Fog. / Mäkitalo, Niko; Aaltonen, Timo; Raatikainen, Mikko; Ometov, Aleksandr; Andreev, Sergey; Koucheryavy, Yevgeni; Mikkonen, Tommi.

In: Journal of Systems and Software, Vol. 157, 110391, 01.11.2019.

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

Feasibility of FPGA accelerated IPsec on cloud. / Vajaranta, Markku; Oinonen, Arto; Hämäläinen, Timo D.; Viitamäki, Vili; Markunmäki, J.; Kulmala, Ari.

In: Microprocessors and Microsystems, Vol. 71, 102861, 01.11.2019.

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

An icon that everyone wants to click : How perceived aesthetic qualities predict app icon successfulness. / Jylhä, Henrietta ; Hamari, Juho.

In: International Journal of Human Computer Studies, Vol. 130, 01.10.2019, p. 73-85.

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

6K and 8K effective resolution with 4K HEVC decoding capability for 360 video streaming. / Zare, Alireza; Homayouni, Maryam; Aminlou, Alireza; Hannuksela, Miska M.; Gabbouj, Moncef.

In: ACM Transactions on Multimedia Computing, Communications and Applications, Vol. 15, No. 2s, 68, 01.08.2019.

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

Are architectural smells independent from code smells? An empirical study. / Arcelli Fontana, Francesca; Lenarduzzi, Valentina; Roveda, Riccardo; Taibi, Davide.

In: Journal of Systems and Software, Vol. 154, 01.08.2019, p. 139-156.

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

Blockchain Technology for Smartphones and Constrained IoT Devices : A Future Perspective and Implementation. / Zhidanov, Konstantin; Bezzateev, Sergey; Afanasyeva, Alexandra; Sayfullin, Mikhail; Vanurin, Sergey; Bardinova, Yulia; Ometov, Aleksandr.

21st IEEE Conference on Business Informatics, CBI 2019. ed. / Jorg Becker; Oscar Pastor; Elena Kornysheva; V. O. Korepanov; Olga A. Tsukanova; Judith Barrios Albornoz; D. Fedyanin; V.N. Burkov; Dmitry M. Nazarov; Dmitriy Novikov; Raisa Uskenbaeva; A V. Shchepkin. IEEE, 2019. p. 20-27 8808043.

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, Corneliu; 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

Acceptance and perceptions of interactive location-tracking displays. / Mäkelä, Ville; Linna, Juhani; Keskinen, Tuuli; Hakulinen, Jaakko; Turunen, Markku.

Pervasive Displays 2019 - 8th ACM International Symposium on Pervasive Displays, PerDis 2019. ed. / Vito Gentile; Jessica R. Cauchard. ACM, 2019. a17.

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

Towards Efficient Code Generation for Exposed Datapath Architectures. / Vadivel, Kanishkan; Jordans, Roel; Stuijk, Sander; Corporaal, Henk; Jääskeläinen, Pekka; Kultala, Heikki.

Proceedings of the 22nd International Workshop on Software and Compilers for Embedded Systems, SCOPES 2019. ed. / Sander Stuijk. ACM, 2019. p. 86-89.

Asterism : Decentralized file sharing application for mobile devices. / Heinisuo, Olli-Pekka; Lenarduzzi, Valentina; Taibi, Davide.

2019 7th IEEE International Conference on Mobile Cloud Computing, Services, and Engineering, MobileCloud 2019. IEEE, 2019. p. 38-47.

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

Artificial intelligence yesterday, today and tomorrow. / Jaakkola, H.; Henno, J.; Mäkelä, J.; Thalheim, B.

2019 42nd International Convention on Information and Communication Technology, Electronics and Microelectronics, MIPRO 2019 - Proceedings. ed. / Karolj Skala; Zeljka Car; Predrag Pale; Darko Huljenic; Matej Janjic; Marko Koracic; Vlado Sruk; Slobodan Ribaric; Tihana Galinac Grbac; Zeljko Butkovic; Marina Cicin-Sain; Dejan Skvorc; Mladen Mauher; Snjezana Babic; Stjepan Gros; Boris Vrdoljak; Edvard Tijan. IEEE, 2019. p. 860-867.

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

Error analysis of NOMA-based user cooperation with SWIPT. / Li, Suyue; Bariah, Lina; Muhaidat, Sami; Sofotasios, Paschalis; Liang, Jie; Wang, Anhong.

Proceedings - 15th Annual International Conference on Distributed Computing in Sensor Systems, DCOSS 2019. IEEE, 2019. p. 507-513.

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

Intelligent data service for farmers. / Linna, P.; Narra, N.; Grönman, J.

2019 42nd International Convention on Information and Communication Technology, Electronics and Microelectronics, MIPRO 2019 - Proceedings. ed. / Karolj Skala; Zeljka Car; Predrag Pale; Darko Huljenic; Matej Janjic; Marko Koracic; Vlado Sruk; Slobodan Ribaric; Tihana Galinac Grbac; Zeljko Butkovic; Marina Cicin-Sain; Dejan Skvorc; Mladen Mauher; Snjezana Babic; Stjepan Gros; Boris Vrdoljak; Edvard Tijan. IEEE, 2019. p. 1072-1075.

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

Reducing crossbar costs in the match-action pipeline. / Zolfaghari, Hesam; Rossi, Davide; Nurmi, Jari.

2019 IEEE 20th International Conference on High Performance Switching and Routing, HPSR 2019. IEEE, 2019. (IEEE International Conference on High Performance Switching and Routing, HPSR).

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

Teaching for virtual work. / Henno, J.; Jaakkola, H.; Mäkelä, J.

2019 42nd International Convention on Information and Communication Technology, Electronics and Microelectronics, MIPRO 2019 - Proceedings. ed. / Karolj Skala; Zeljka Car; Predrag Pale; Darko Huljenic; Matej Janjic; Marko Koracic; Vlado Sruk; Slobodan Ribaric; Tihana Galinac Grbac; Zeljko Butkovic; Marina Cicin-Sain; Dejan Skvorc; Mladen Mauher; Snjezana Babic; Stjepan Gros; Boris Vrdoljak; Edvard Tijan. IEEE, 2019. p. 818-826.

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

A Semantic Meta-Model Repository for Lightweight M2M. / Silverajan, B.; Zhao, Hanning; Kamath, Arjun.

2018 IEEE International Conference on Communication Systems, ICCS 2018. IEEE, 2019. p. 468-472.

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

Advancements in Solution Processable Devices using Metal Oxides For Printed Internet-of-Things Objects. / Berger, Paul R.; Li, Miao; Mattei, Ryan M.; Niang, Maimouna A.; Talisa, Noah; Tripepi, Michael; Harris, Brandon; Bhalerao, Sagar R.; Chowdhury, Enam A.; Winter, Charles H.; Lupo, Donald.

2019 Electron Devices Technology and Manufacturing Conference, EDTM 2019. IEEE, 2019. p. 160-162.

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

A Framework for Design and Implementation of Adaptive Digital Predistortion Systems. / Li, Lin; Deaville, Peter; Sapio, Adrian; Anttila, Lauri; Valkama, Mikko; Wolf, Marilyn; Bhattacharyya, Shuvra S.

Proceedings 2019 IEEE International Conference on Artificial Intelligence Circuits and Systems, AICAS 2019. IEEE, 2019. p. 112-116.

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

Challenges of Multi-Factor Authentication for Securing Advanced IoT Applications. / Ometov, Aleksandr; Petrov, Vitaly; Bezzateev, Sergey; Andreev, Sergey; Koucheryavy, Yevgeni; Gerla, Mario.
In: IEEE Network, Vol. 33, No. 2, 01.03.2019, p. 82-88.
Research output: Contribution to journal › Article › Scientific › peer-review

Elastic Neural Networks for Classification. / Zhou, Yi; Bai, Yue; Bhattacharyya, Shuvra S.; Huttunen, Heikki.
Proceedings 2019 IEEE International Conference on Artificial Intelligence Circuits and Systems, AICAS 2019. IEEE, 2019. p. 251-255.
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

Analysis of an efficient parallel implementation of active-set Newton algorithm. / San Juan Sebastián, Pablo; Virtanen, Tuomas; Garcia-Molla, Victor M.; Vidal, Antonio M.
In: Journal of Supercomputing, Vol. 75, No. 3, 03.2019, p. 1298-1309.
Research output: Contribution to journal › Article › Scientific › peer-review

LordCore: Energy-Efficient OpenCL-Programmable Software-Defined Radio Coprocessor. / Kultala, Heikki; Viitanen, Timo; Berg, Heikki; Jääskeläinen, Pekka; Multanen, Joonas; Kokkonen, Mikko; Raiskila, Kalle; Zetterman, Tommi; Takala, Jarmo.
In: IEEE Transactions on Very Large Scale Integration (VLSI) Systems, Vol. 27, No. 5, 26.02.2019, p. 1029-1042.
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

On the Secrecy Capacity of Fisher-Snedecor F Fading Channels. / Badarneh, Osamah S.; Sofotasios, Paschalis C.; Muhaidat, Sami; Cotton, Simon L.; Rabie, Khaled; Al-Dhahir, Naofal.
2018 14th International Conference on Wireless and Mobile Computing, Networking and Communications, WiMob 2018. IEEE, 2018. p. 102-107.
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

The N-Fisher-Snedecor F Cascaded Fading Model. / Badarneh, Osamah S.; Muhaidat, Sami; Sofotasios, Paschalis C.; Cotton, Simon L.; Rabie, Khaled; Da Costa, Daniel B.
2018 14th International Conference on Wireless and Mobile Computing, Networking and Communications, WiMob 2018. IEEE, 2018.
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

Power mitigation of a heterogeneous multicore architecture on FPGA/ASIC by DFS/DVFS techniques. / Nouri, Sajjad; Rossi, Davide; Nurmi, Jari.
In: Microprocessors and Microsystems, Vol. 63, 01.11.2018, p. 259-268.
Research output: Contribution to journal › Article › Scientific › peer-review

A Low-Cost High-Speed Self-Checking Carry Select Adder with Multiple-Fault Detection. / Valinataj, Mojtaba; Mohammadnejad, Abbas; Nurmi, Jari.
In: Microelectronics journal, Vol. 81, 11.2018, p. 16-27.
Research output: Contribution to journal › Article › Scientific › peer-review

Toward Efficient Execution of RVC-CAL Dataflow Programs on Multicore Platforms. / Hautala, Ilkka; Boutellier, Jani; Nyländén, Teemu; Silvén, Olli.
In: Journal of Signal Processing Systems, Vol. 90, No. 11, 11.2018, p. 1507-1517.

Visualization of memory map information in embedded system design. / Teuvo, Mikko; Pekkarinen, Esko; Hämäläinen, Timo D.

Proceedings - 21st Euromicro Conference on Digital System Design, DSD 2018. IEEE, 2018. p. 163-166 8491811.

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

Olfactory display prototype for presenting and sensing authentic and synthetic odors. / Salminen, Katri; Rantala, Jussi; Isokoski, Poika; Lehtonen, Marko; Müller, Philipp; Karjalainen, Markus; Väliaho, Jari; Kontunen, Anton; Nieminen, Ville; Leivo, Joni; Telembeci, Anca Andreea; Lekkala, Jukka; Kallio, Pasi; Surakka, Veikko.

ICMI 2018 - Proceedings of the 2018 International Conference on Multimodal Interaction. ACM, 2018. p. 73-77.

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

Visualization in the integrated SimPhoNy multiscale simulation framework. / Adler, Joan; Kulju, Sampo; Hyväluoma, Jari; Mattila, Keijo; Choi, Kit; Tziakos, Ioannis; Pinte, Didrik; García, G. A.; Makushok, Y.; Makushok, V.; Lama, J.; Román-Pérez, G.; Hashibon, Adham; Sadeghi, Mehdi; Franklin, Nathan; Silverman, Amihai.

In: Computer Physics Communications, Vol. 231, 01.10.2018, p. 45-61.

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

Energy-Delay Trade-offs in Instruction Register File Design. / Multanen, Joonas; Kultala, Heikki; Jääskeläinen, Pekka.

2018 IEEE Nordic Circuits and Systems Conference (NORCAS): NORCHIP and International Symposium of System-on-Chip (SoC). IEEE, 2018.

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

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

A Framework for Data Collection, Transformation and Processing in Industrial Systems. / Iftikhar, Umer; Mohammed, Wael M.; Ferrer, Borja Ramis; Lastra, Jose L.Martinez.

Proceedings - IEEE 16th International Conference on Industrial Informatics, INDIN 2018. Institute of Electrical and Electronics Engineers Inc., 2018. p. 707-712 8471996 (IEEE International Conference on Industrial Informatics).

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

An ISA-95 based Ontology for Manufacturing Systems Knowledge Description Extended with Semantic Rules. / Seyedamir, Ahmadi; Ferrer, Borja Ramis; Lastra, Jose L.Martinez.

Proceedings - IEEE 16th International Conference on Industrial Informatics, INDIN 2018. Institute of Electrical and Electronics Engineers Inc., 2018. p. 374-380 8471929 (IEEE International Conference on Industrial Informatics).

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

Supporting a Cloud Platform with Streams of Factory Shop Floor Data in the Context of the Industry 4.0. / Mohammed, Wael M.; Ferrer, Borja Ramis; Iftikhar, Umer; Lastra, Jose L.Martinez; Simarro, Javier Hitado.

Proceedings - IEEE 16th International Conference on Industrial Informatics, INDIN 2018. Institute of Electrical and Electronics Engineers Inc., 2018. p. 786-791 8471981 (IEEE International Conference on Industrial Informatics).

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

Towards the Adoption of Cyber-Physical Systems of Systems Paradigm in Smart Manufacturing Environments. / Ferrer, Borja Ramis; Mohammed, Wael M.; Martinez Lastra, Jose L.; Villalonga, Alberto; Beruvides, Gerardo; Castano, Fernando; Haber, Rodolfo E.

Proceedings - IEEE 16th International Conference on Industrial Informatics, INDIN 2018. Institute of Electrical and Electronics Engineers Inc., 2018. p. 792-799 8472061 (IEEE International Conference on Industrial Informatics).

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

Dimensional analysis conceptual modeling supporting adaptable reasoning in simulation-based training. / Coatanea, Eric; Roca, Ric.

2018 13th System of Systems Engineering Conference, SoSE 2018. IEEE, 2018. p. 245-252.

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

Low latency edge rendering scheme for interactive 360 degree virtual reality gaming. / Viitanen, Marko; Vanne, Jarno; Hämäläinen, Timo D.; Kulmala, Ari.

Proceedings - 2018 IEEE 38th International Conference on Distributed Computing Systems, ICDCS 2018. IEEE, 2018. p. 1557-1560.

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

Effects of blockage in deploying mmWave drone base stations for 5g networks and beyond. / Gapeyenko, Margarita; Bor-Yaliniz, Irem; Andreev, Sergey; Yanikomeroglu, Halim; Koucheryavy, Yevgeni.

2018 IEEE International Conference on Communications Workshops. IEEE, 2018. p. 1-6.

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

Modeling and cancellation of self-interference in full-duplex radio transceivers : Volterra series-based approach. / Korpi, Dani; Turunen, Matias; Anttila, Lauri; Valkama, Mikko.

2018 IEEE International Conference on Communications Workshops. IEEE, 2018. p. 1-6.

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

Optimizing wirelessly powered crowd sensing : Trading energy for data. / Li, Xiaoyang; You, Changsheng; Andreev, Sergey; Gong, Yi; Huang, Kaibin.

2018 IEEE International Conference on Communications Workshops. IEEE, 2018. p. 1-6.

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

Cybersecurity Attacks and Defences for Unmanned Smart Ships. / Silverajan, Bilhanan; Ocak, Mert; Nagel, Benjamin.

Proceedings - IEEE 2018 International Congress on Cybermatics: 2018 IEEE Conferences on Internet of Things, Green Computing and Communications, Cyber, Physical and Social Computing, Smart Data, Blockchain, Computer and Information Technology, iThings/GreenCom/CPSCoM/SmartData/Blockchain/CIT 2018. IEEE, 2018. p. 15-20.

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

Secure Firmware Updates for IoT : A Survey. / Kolehmainen, Antti.

Proceedings - IEEE 2018 International Congress on Cybermatics: 2018 IEEE Conferences on Internet of Things, Green Computing and Communications, Cyber, Physical and Social Computing, Smart Data, Blockchain, Computer and Information Technology, iThings/GreenCom/CPSCoM/SmartData/Blockchain/CIT 2018. IEEE, 2018. p. 112-117.

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

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

An approach for implementing key performance indicators of a discrete manufacturing simulator based on the ISO 22400 standard. / Muhammad, Usman; Ferrer, Borja Ramis; Mohammed, Wael M.; Lastra, Jose L.Martinez.

2018 IEEE Industrial Cyber-Physical Systems, ICPS 2018. IEEE, 2018. p. 629-636.

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

Towards the deployment of cloud robotics at factory shop floors : A prototype for smart material handling. / Hussnain, Ali; Ferrer, Borja Ramis; Lastra, Jose L.Martinez.
2018 IEEE Industrial Cyber-Physical Systems, ICPS 2018. IEEE, 2018. p. 44-50.
Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Toward efficient many-core scheduling of partial expansion graphs. / Tran, Hai Nam; Bhattacharyya, Shuvra S.; Talpin, Jean Pierre; Gautier, Thierry.
Proceedings of the 21st International Workshop on Software and Compilers for Embedded Systems, SCOPES 2018. Association for Computing Machinery, Inc, 2018. p. 100-103.
Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Analysis of differentially modulated cooperative communications over asymmetric fading channels. / Almaeeni, Sara; Sofotasios, Paschalis C.; Muhaidat, Sami; Karagiannidis, George K.
Proceedings - 2018 International Conference on Advanced Communication Technologies and Networking, CommNet 2018. IEEE, 2018. p. 1-8.
Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Capacity analysis under generalized composite fading conditions. / Sofotasios, Paschalis C.; Yoo, Seong Ki; Bhargav, Nidhi; Muhaidat, Sami; Cotton, Simon L.; Matthaiou, Michail; Valkama, Mikko; Karagiannidis, George K.
Proceedings - 2018 International Conference on Advanced Communication Technologies and Networking, CommNet 2018. IEEE, 2018. p. 1-10.
Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Maximum achievable throughput and interference mitigation for SUN in coexistence with WLAN. / Mohamed, Saad; Hamila, Ridha; Al-Dhahir, Naofal; Gouisse, Ala; Benbrahim, Lazhar; Gabbouj, Moncef.
Proceedings - 2018 International Conference on Advanced Communication Technologies and Networking, CommNet 2018. IEEE, 2018. p. 1-6.
Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Outage probability of multi-carrier NOMA systems under joint I/Q imbalance. / Selim, Bassant; Muhaidat, Sami; Sofotasios, Paschalis C.; Sharif, Bayan S.; Stouraitis, Thanos; Karagiannidis, George K.; Al-Dhahir, Naofal.
Proceedings - 2018 International Conference on Advanced Communication Technologies and Networking, CommNet 2018. IEEE, 2018. p. 1-7.
Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Preface : Special Issue on 'New Hydraulic Components for Tough Robots'. / Suzumori, Koichi; Hyon, Sang Ho; Semini, Claudio; Mattila, Jouni; Kanda, Takefumi.
In: Advanced Robotics, Vol. 32, No. 9, 03.05.2018.
Research output: Contribution to journal > Editorial > Scientific

A design tool for high performance image processing on multicore platforms. / Wu, Jiahao; Blattner, Timothy; Keyrouz, Walid; Bhattacharyya, Shuvra S.
Proceedings of the 2018 Design, Automation and Test in Europe Conference and Exhibition, DATE 2018. IEEE, 2018. p. 1304-1309.
Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Memory-Constrained vectorization and scheduling of dataflow graphs for hybrid CPU-GPU platforms. / Lin, Shuoxin; Wu, Jiahao; Bhattacharyya, Shuvra S.
In: ACM Transactions on Embedded Computing Systems, Vol. 17, No. 2, 50, 01.02.2018.
Research output: Contribution to journal > Article > Scientific > peer-review

Analyzing Effects of Directional Deafness on mmWave Channel Access in Unlicensed Bands. / Galinina, Olga; Pyattaev, Alexander; Johnsson, Kerstin; Andreev, Sergey; Koucheryavy, Yevgeni.
2017 IEEE Globecom Workshops, GC Wkshps 2017 - Proceedings. IEEE, 2018. p. 1-7.
Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Detailed Interference Analysis in Dense mmWave Systems Employing Dual-Polarized Antennas. / Solomitckii, Dmitrii; Petrov, Vitaly; Nikopour, Hosein; Akdeniz, Mustafa; Orhan, Oner; Himayat, Nageen; Talwar, Shilpa; Andreev, Sergey; Koucheryavy, Yevgeni.

2017 IEEE Globecom Workshops. IEEE, 2018. p. 1-6.

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

Modeling Three-Dimensional Interference and SIR in Highly Directional mmWave Communications. / Kovalchukov, Roman; Samuylov, Andrey; Moltchanov, Dmitri; Ometov, Aleksandr; Andreev, Sergey; Koucheryavy, Yevgeni; Samouylov, Konstantin.

2017 IEEE Global Communications Conference, GLOBECOM 2017. IEEE, 2018. p. 1-7.

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

Advanced wireless m-bus platform for intensive field testing in industry 4.0-based systems. / Masek, Pavel; Hudec, David; Krejci, Jan; Ometov, Aleksandr; Hosek, Jiri; Andreev, Sergey; Kröpfel, Franz; Koucheryavy, Yevgeni.

24th European Wireless Conference. VDE Verlag, 2018. p. 150-155.

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

Exposed Datapath optimizations for Loop Scheduling. / Kultala, Heikki; Jääskeläinen, Pekka; IJzerman, Johannes; Lehtonen, Lasse; Viitanen, Timo; Mäkitalo, Markku; Takala, Jarmo.

Embedded Computer Systems: Architectures, Modeling, and Simulation 2017 IEEE International Conference (IC-SAMOS 2017). IEEE, 2018. p. 171-178.

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

Federated IoT services leveraging 5G technologies at the edge. / Farris, I.; Orsino, A.; Militano, L.; Iera, A.; Araniti, G.
In: Ad Hoc Networks, Vol. 68, 2018, p. 58-69.

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

Outlier edge detection using random graph generation models and applications. / Zhang, Honglei; Kiranyaz, Serkan; Gabbouj, Moncef.

In: Journal of Big Data, Vol. 4, No. 1, 11, 01.12.2017.

Research output: Contribution to journal › Article › 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

Evaluation of a Heterogeneous Multicore Architecture by Design and Test of an OFDM Receiver. / Nouri, Sajjad; Hussain, Waqar; Nurmi, Jari.

In: IEEE Transactions on Parallel and Distributed Systems, 01.11.2017, p. 3171.

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

Gamified crowdsourcing : Conceptualization, literature review, and future agenda. / Morschheuser, Benedikt; Hamari, Juho; Koivisto, Jonna; Maedche, Alexander.

In: International Journal of Human-Computer Studies, Vol. 106, 01.10.2017, p. 26-43.

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

Hardware design methodology using lightweight dataflow and its integration with low power techniques. / Fanni, Tiziana; Li, Lin; Viitanen, Timo; Sau, Carlo; Xie, Renjie; Palumbo, Francesca; Raffo, Luigi; Huttunen, Heikki; Takala, Jarmo; Bhattacharyya, Shuvra S.

In: Journal of Systems Architecture, Vol. 78, 01.08.2017, p. 15-29.

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

Design and implementation of adaptive signal processing systems using Markov decision processes. / Li, Lin; Sapio, Adrian E.; Wu, Jiahao; Liu, Yanzhou; Lee, Kyunghun; Wolf, Marilyn; Bhattacharyya, Shuvra S.
2017 IEEE 28th International Conference on Application-Specific Systems, Architectures and Processors, ASAP 2017. IEEE, 2017. p. 170-175.

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; Lempiäinen, 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

Angular wall loss model and Extended Building Penetration model for outdoor to indoor propagation. / Sheikh, Muhammad Usman; Hiltunen, Kimmo; Lempiäinen, 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

Feasibility of self-backhauling in full-duplex radio access systems under QoS constraints. / Korpi, Dani; Riihonen, Taneli; Valkama, Mikko.

2017 IEEE International Conference on Communications Workshops, ICC Workshops 2017. IEEE, 2017. p. 749-754.

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

On the prospects of full-duplex military radios. / Riihonen, Taneli; Korpi, Dani; Rantula, Olli; Valkama, Mikko.

2017 International Conference on Military Communications and Information Systems, ICMCIS 2017. IEEE, 2017.

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

Guest Editorial : Implementation Issues in System-on-Chip. / Ellervee, 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

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

Comparing the Built-In Application Architecture Models in the Web Browser. / Taivalsaari, Antero; Mikkonen, Tommi; Pautasso, Cesare; Systä, Kari.

2017 IEEE International Conference on Software Architecture (ICSA). IEEE, 2017. p. 51-54 7930198.

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

Experimental evaluation of dynamic licensed shared access operation in live 3GPP LTE system. / Masek, Pavel; Mokrov, Evgeny; Pyattaev, Alexander; Zeman, Krystof; Ponomarenko-Timofeev, Aleksei; Samuylov, Andrey; Sopin, Eduard; Hosek, Jiri; Gudkova, Irina A.; Andreev, Sergey; Novotny, Vit; Koucheryavy, Yevgeni; Samouylov, Konstantin.

2016 IEEE Global Communications Conference (GLOBECOM). IEEE, 2017.

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

Stop it, and be stubborn! / Valmari, Antti.

In: ACM Transactions on Embedded Computing Systems, Vol. 16, No. 2, 46, 01.01.2017.

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.; Halem, 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

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

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

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

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

Exploiting D2D communications at the network edge for mission-critical IoT applications. / Orsino, A.; Farris, I.; Militano, L.; Araniti, G.; Andreev, S.; Gudkova, I. A.; Koucheryavy, Y.; Iera, A.

European Wireless 2017 - 23rd European Wireless Conference. VDE, 2017.

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

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

Urban 3D segmentation and modelling from street view images and LiDAR point clouds. / Babahajiani, Pouria; Fan, Lixin; Kämäräinen, Joni-Kristian; Gabbouj, Moncef.

In: Machine Vision and Applications, Vol. 28, No. 7, 2017, p. 679–694.

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

Wireless M-bus in industrial IoT : Technology overview and prototype implementation. / Zeman, Krystof; Masek, Pavel; Krejci, Jan; Ometov, Aleksandr; Hosek, Jiri; Andreev, Sergey; Kröpfl, Franz.

European Wireless 2017 - 23rd European Wireless Conference. VDE, 2017.

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

Xor-Masking: A Novel Statistical Method for Instruction Read Energy Reduction in Contemporary SRAM Technologies. / Multanen, Joonas; Viitanen, Timo; Jääskeläinen, Pekka; Takala, Jarmo.

2016 IEEE International Workshop on Signal Processing Systems (SiPS). IEEE, 2016.

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

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

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

SoftWater : Software-defined networking for next-generation underwater communication systems. / Akyildiz, Ian F.; Wang, Pu; Lin, Shih Chun.
In: Ad Hoc Networks, Vol. 46, 08.2016.
Research output: Contribution to journal › Article › Scientific › peer-review

On the Architecture of Liquid Software: Technology Alternatives and Design Space. / Gallidabino, Andrea; Pautasso, Cesare; Ilvonen, Ville; Mikkonen, Tommi; Systä, Kari; Voutilainen, Jari-Pekka; Taivalsaari, Antero.
Proceedings - 2016 13th Working IEEE/IFIP Conference on Software Architecture, WICSA 2016. IEEE, 2016. p. 122-127.
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

Accelerating Computation on an Android Phone with OpenCL Parallelism and Optimizing Workload Distribution between a Phone and a Cloud Service. / Wang, Kui; Nurmi, Jari; Ahonen, Tapani.
2016 Intl IEEE Conferences Ubiquitous Intelligence & Computing, Advanced and Trusted Computing, Scalable Computing and Communications, Cloud and Big Data Computing, Internet of People, and Smart World Congress (UIC/ATC/ScalCom/CBDCCom/IoP/SmartWorld), . IEEE, 2016. p. 636-642.
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

Investigating mid-air gestures and handhelds in motion tracked environments. / Mäkelä, Ville; Korhonen, Hannu; Ojala, Jarno; Järvi, Antti; Väänänen, Kaisa; Raisamo, Roope; Turunen, Markku.
PerDis 2016 - Proceedings of the 5th ACM International Symposium on Pervasive Displays. ACM, 2016. p. 45-51.
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

A design framework for mapping vectorized synchronous dataflow graphs onto CPU-GPU platforms. / Lin, Shuoxin; Liu, Yanzhou; Plishker, William; Bhattacharyya, Shuvra S.
Proceedings of the 19th International Workshop on Software and Compilers for Embedded Systems, SCOPES 2016. ACM, 2016. p. 20-29.
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

Extended Ewald summation technique. / Kylänpää, Ilkka; Räsänen, Esa.
In: Computer Physics Communications, Vol. 206, 17.05.2016, p. 64–68.
Research output: Contribution to journal › Article › Scientific › peer-review

Detection of bubbles as concentric circular arrangements. / Strokina, Nataliya; Matas, Jiri; Eerola, Tuomas; Lensu, Lasse; Kälviäinen, Heikki.
In: Machine Vision and Applications, Vol. 27, No. 3, 04.2016, p. 387-396.
Research output: Contribution to journal › Article › 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

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.

Supporting deterministic medium access control in wireless vehicular communications. / Cruz, Cristovao; Ferreira, Joaquim; Oliveira, Arnaldo.

2015 IEEE 82nd Vehicular Technology Conference, VTC Fall 2015 - Proceedings. IEEE, 2016.

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

The influence of developer multi-homing on competition between software ecosystems. / Hyrynsalmi, Sami; Suominen, Arho; Mäntymäki, Matti.

In: Journal of Systems and Software, Vol. 111, 01.01.2016, p. 119-127.

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

Analysis of a receiver-based reliable broadcast approach for vehicular networks. / Gholibeigi, Mozhdeh; Heijnen, Geert; Moltchanov, Dmitri; Koucheryavy, Yevgeni.

In: Ad Hoc Networks, Vol. 37, 2016, p. 63-75.

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

Gravity gradient routing for information delivery in fog Wireless Sensor Networks. / Ivanov, Stepan; Balasubramaniam, Sasitharan; Botvich, Dmitri; Akan, Ozgur B.

In: Ad Hoc Networks, Vol. 46, 2016, p. 61-74.

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

HARP2: An X-Scale Reconfigurable Accelerator-Rich Platform for Massively-Parallel Signal Processing Algorithms. / Hussain, Waqar; Airoldi, Roberto; Hoffmann, Henry; Ahonen, Tapani; Nurmi, Jari.

In: Journal of Signal Processing Systems, 2016, p. 341-353.

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

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

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

BM3D image denoising using heterogeneous computing platforms. / Sarjanoja, Sampsa; 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

Reconfigurable computing for future vision-capable devices. / López, Miguel Bordallo; Nieto, Alejandro; Silvén, Olli; Bóutellier, Jani; Vilaríño, David López.

Proceedings - 2015 International Conference on Embedded Computer Systems: Architectures, Modeling and Simulation, SAMOS 2015. Institute of Electrical and Electronics Engineers Inc., 2015. p. 34-41 7363657.

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

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

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

Haptic feedback of gaze gestures with glasses : Localization accuracy and effectiveness. / Rantala, Jussi; Kangas, Jari; Isokoski, Poika; Akkil, Deepak; Špakov, Oleg; Raisamo, Roope.

UbiComp and ISWC 2015 - Proceedings of the 2015 ACM International Joint Conference on Pervasive and Ubiquitous Computing and the Proceedings of the 2015 ACM International Symposium on Wearable Computers. Association for Computing Machinery, Inc, 2015. p. 855-862.

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

The extended one-dimensional discrete phase retrieval problem. / Rusu, Corneliu; 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

Exploring the Stability of Software with Time-Series Cross-Sectional Data. / Ruohonen, Jukka; Hyrynsalmi, Sami; Leppänen, Ville.

Proceedings - 2nd International Workshop on Software Architecture and Metrics, SAM 2015. Institute of Electrical and Electronics Engineers Inc., 2015. p. 41-47.

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

Gathering useful programming data; Analysis and insights from real-time collaborative editing. / Rantala, M.; Soini, J.; Kilamo, T.

2015 38th International Convention on Information and Communication Technology, Electronics and Microelectronics, MIPRO 2015 - Proceedings. The Institute of Electrical and Electronics Engineers, Inc., 2015. p. 229-234 7160270.

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

LTE indoor MIMO performances field measurements. / Nguyen-Thanh, Duc; Le-Tien, Thuong; Bui-Thu, Cao; Le-Thanh, Toi.

International Conference on Advanced Technologies for Communications. IEEE, 2015. p. 84-89.

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

Social behavior in bacterial nanonetworks : Challenges and opportunities. / Hasan, Monowar; Hossain, Ekram; Balasubramaniam, Sasitharan; Koucheryavy, Yevgeni.

In: IEEE Network, Vol. 29, No. 1, 7018200, 01.01.2015, p. 26-34.

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

Towards Trusted eHealth Services in the Cloud. / Michalas, Antonis; Dowsley, Rafael.

Proceedings - 2015 IEEE/ACM 8th International Conference on Utility and Cloud Computing, UCC 2015. Institute of Electrical and Electronics Engineers Inc., 2015. p. 618-623 7431484.

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

Dynamic text presentation in print interpreting - An eye movement study of reading behaviour. / Sharmin, Selina; Špakov, Oleg; Rähkä, Kari Jouko.

In: International Journal of Human-Computer Studies, Vol. 78, 2015, p. 17-30.

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

Techno-Economical Comparison of Dynamic DAS and Legacy Macrocellular Densification : Capacity and Cost-Efficiency Analysis of Alternative Deployment Solutions for Outdoor Service Provisioning. / Yunas, Syed Fahad; Valkama, Mikko; Niemelä, Jarno.

In: International Journal of Wireless Information Networks, Vol. 22, No. 4, 2015, p. 312-326.

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

A multi-coil wireless power transfer system utilizing dynamic matching for in-vivo and biomedical applications. / Bito, J.; Cook, B. S.; Tentzeris, M. M.

2014 Asia-Pacific Microwave Conference Proceedings, APMC 2014. Institute of Electrical and Electronics Engineers Inc., 2014. p. 680-682 7067912.

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

BIM based schedule control for precast concrete supply chain. / Nissilä, J.; Heikkilä, R.; Romo, I.; Malaska, M.; Aho, T.

31st International Symposium on Automation and Robotics in Construction and Mining, ISARC 2014 - Proceedings.

University of Technology Sydney, 2014. p. 667-671.

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

Federation lifecycle management incorporating coordination of bio-inspired self-management processes. / Meskill, Brian; Balasubramaniam, Sasitharan; Brennan, Rob; Feeney, Kevin; Jennings, Brendan.

In: JOURNAL OF NETWORK AND SYSTEMS MANAGEMENT, Vol. 21, No. 4, 12.2013, p. 650-676.

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

High-performance and low-energy buffer mapping method for multiprocessor DSP systems. / Lee, Dongwon; Wolf, Marilyn; Bhattacharyya, Shuvra S.

In: ACM Transactions on Embedded Computing Systems, Vol. 12, No. 3, 82, 03.2013.

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

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

An IPv6-enabled wireless shoe-mounted platform for health-monitoring. / Mariotti, C.; Lakafosis, V.; Tentzeris, M. M.; Roselli, L.

WiSNet 2013 - Proceedings: 2013 IEEE Topical Conference on Wireless Sensors and Sensor Networks - 2013 IEEE Radio and Wireless Week, RWW 2013. 2013. p. 46-48 6488629.

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

Applying the adaptive hybrid flow-Shop scheduling method to schedule a 3GPP LTE physical layer algorithm onto many-core digital signal processors. / Heulot, Julien; Boutellier, Jani; Pelcat, Maxime; Nezan, Jean François; Aridhi, Slaheddine.

Proceedings of the 2013 NASA/ESA Conference on Adaptive Hardware and Systems, AHS 2013. 2013. p. 123-129 6604235.

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

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

Guest editorial. / Ellervee, Peeter; Nurmi, Jari.

In: Microprocessors and Microsystems, Vol. 37, No. 4-5, 2013, p. 430-431.

Research output: Contribution to journal › Article › 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

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

PiMM : Parameterized and interfaced dataflow meta-model for MPSoCs runtime reconfiguration. / Desnos, Karol; Pelcat, Maxime; Nezan, Jean François; Bhattacharyya, Shuvra S.; Aridhi, Slaheddine.

Proceedings - 2013 International Conference on Embedded Computer Systems: Architectures, Modeling and Simulation, IC-SAMOS 2013. IEEE COMPUTER SOCIETY PRESS, 2013. p. 41-48 6621104.

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

Scheduling of parallelized synchronous dataflow actors. / Zhou, Zheng; Desnos, Karol; Pelcat, Maxime; Nezan, Jean François; Plishker, William; Bhattacharyya, Shuvra S.
2013 International Symposium on System-on-Chip, SoC 2013 - Proceedings. IEEE COMPUTER SOCIETY PRESS, 2013. 6675271.

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

Touch gestures in communicating emotional intention via vibrotactile stimulation. / Rantala, Jussi; Salminen, Katri; Raisamo, Roope; Surakka, Veikko.

In: International Journal of Human-Computer Studies, Vol. 71, No. 6, 2013, p. 679-690.

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

Wireless chipless passive microfluidic temperature sensor. / Rifai, A.; Debourg, E.; Bouaziz, S.; Traille, A.; Pons, P.; Aubert, H.; Tentzeris, M.

2013 Transducers and Eurosensors XXVII: The 17th International Conference on Solid-State Sensors, Actuators and Microsystems, TRANSDUCERS and EUROSENSORS 2013. 2013. p. 1024-1027 6626944.

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

fs-PGBR : A scalable and delay sensitive cloud routing protocol. / Mineraud, Julien; Balasubramaniam, Sasitharan; Kangasharju, Jussi; Donnelly, William.

SIGCOMM'12 - Proceedings of the ACM SIGCOMM 2012 Conference Applications, Technologies, Architectures, and Protocols for Computer Communication. 2012. p. 301-302.

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

Inkjet-printed monopole antennas for enhanced-range WBAN and wearable biomonitring application. / Kim, Sangkil; Kawahara, Yoshihiro; Tentzeris, Manos M.

MobileHealth'12 - Proceedings of the 2nd ACM International Workshop on Pervasive Wireless Healthcare. 2012. p. 33-38.

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

Instrumentation-driven model detection for dataflow graphs. / Chukhman, Ilya; Plishker, William; Bhattacharyya, Shuvra S.
2012 International Symposium on System on Chip, SoC 2012. 2012. 6376361.

Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > 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

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

Novel approaches to crawling important pages early. / Alam, Md Hijbul; Ha, Jong Woo; Lee, Sang Keun.

In: Knowledge and Information Systems, Vol. 33, No. 3, 2012, p. 707-734.

Partial expansion graphs : Exposing parallelism and dynamic scheduling opportunities for DSP applications. / Zaki, George F.; Plishker, William; Bhattacharyya, Shuvra S.; Fruth, Frank.

Proceedings - 2012 IEEE 23rd International Conference on Application-Specific Systems, Architectures and Processors, ASAP 2012. 2012. p. 86-93 6341457.

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

Power allocation in multi-node cooperative network in Rician fading channels. / Fikadu, Mulugeta K.; Elmusrati, Mohammed; Virrankoski, Reino.

2012 IEEE 8th International Conference on Wireless and Mobile Computing, Networking and Communications, WiMob 2012. 2012. p. 496-501 6379119.

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

Reconfigurable miniature sensor nodes for condition monitoring. / Nylanden, Teemu; Boutellier, Jani; Nikunen, Karri; Hannuksela, Jari; Silven, Olli.

Proceedings - 2012 International Conference on Embedded Computer Systems: Architectures, Modeling and Simulation, IC-SAMOS 2012. 2012. p. 113-119 6404164.

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

The development of constructability using BIM as an intensifying technology. / Tauriainen, M.; Mero, A. K.; Lemström, A.; Puttonen, J.; Saari, A.

eWork and eBusiness in Architecture, Engineering and Construction - Proceedings of the European Conference on Product and Process Modelling 2012, ECPPM 2012. 2012. p. 713-716.

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

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

Bit-sliced binary normal basis multiplication. / Brumley, Billy; Page, Dan.

Proceedings - 20th IEEE Symposium on Computer Arithmetic, ARITH-20. 2011. p. 205-212 5992128.

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

Design methods for wireless sensor network building energy monitoring systems. / Cho, Inkeun; Shen, Chung Ching; Potbhare, Siddharth; Bhattacharyya, Shuvra S.; Goldsman, Neil.

Proceedings of the 36th Annual IEEE Conference on Local Computer Networks, LCN 2011. 2011. p. 974-981 6115580.

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

Generation of all radix-2 fast Fourier transform algorithms using binary trees. / Qureshi, Fahad; Gustafsson, Oscar.

2011 20th European Conference on Circuit Theory and Design, ECCTD 2011. 2011. p. 677-680 6043634.

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

Inkjet printing of UWB antennas on paper based substrates. / Shaker, G.; Rida, A.; Safavi-Naeini, S.; Tentzeris, M. M.; Nikolaou, S.

Proceedings of the 5th European Conference on Antennas and Propagation, EUCAP 2011. 2011. p. 3001-3004 5782210.
Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › 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

Nonlinear robust control for DC-DC converters. / Soldatos, Argiris G.; Karamanakos, Petros P.; Pavlou, Konstantinos G.; Manias, Stefanos N.

2010 IEEE International Conference on Electronics, Circuits, and Systems, ICECS 2010 - Proceedings. 2010. p. 994-997.

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

Conversion algorithms and implementations for koblitz curve cryptography. / Brumley, Billy Bob; Jarvinen, Kimmo U.

In: IEEE Transactions on Computers, Vol. 59, No. 1, 5255226, 04.01.2010, p. 81-92.

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

OPAS : Ontology processing for assisted synthesis of conceptual design solutions. / Christophe, François; Sell, Raivo; Bernard, Alain; Coatanéa, Eric.

Proceedings of the ASME International Design Engineering Technical Conferences and Computers and Information in Engineering Conference 2009, DETC2009. Vol. 5 PART A. ed. 2010. p. 249-260.

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

Cavity formation in split ring resonators. / Caglayan, Humeyra; Bulu, Irfan; Loncar, Marko; Ozbay, Ekmel.

In: Photonics and Nanostructures - Fundamentals and Applications, Vol. 6, No. 3-4, 12.2008, p. 200-204.

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

Dynamic and sensitivity analysis of KNTU CDRPM : A cable driven redundant parallel manipulator. / Aref, Mohammad M.; Gholami, Pooneh; Taghirad, Hamid D.

2008 IEEE/ASME International Conference on Mechatronics and Embedded Systems and Applications, MESA 2008. 2008. p. 528-533 4735650.

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

Physics and applications of photonic crystals. / Ozbay, Ekmel; Bulu, Irfan; Aydin, Koray; Caglayan, Humeyra; Guven, Kaan.

In: Photonics and Nanostructures - Fundamentals and Applications, Vol. 2, No. 2, 10.2004, p. 87-95.

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