

### **Is it a tool or a toy? How user conceptions of a system's purpose affect their experience and use**

Köse, D. B., Morschheuser, B. & Hamari, J., 1 Dec 2019, In : *International Journal of Information Management*. 49, p. 461-474 14 p.

Research output: [Contribution to journal](#) > [Article](#) > [Scientific](#) > [peer-review](#)

### **Action-Oriented Programming Model: Collective Executions and Interactions in the Fog**

Mäkitalo, N., Aaltonen, T., Raatikainen, M., Ometov, A., Andreev, S., Koucheryavy, Y. & Mikkonen, T., 1 Nov 2019, In : *Journal of Systems and Software*. 157, 110391.

Research output: [Contribution to journal](#) > [Article](#) > [Scientific](#) > [peer-review](#)

### **Motivating scholars' responses in academic social networking sites: An empirical study on ResearchGate Q&A behavior**

Deng, S., Tong, J., Lin, Y., Li, H. & Liu, Y., 1 Nov 2019, In : *INFORMATION PROCESSING AND MANAGEMENT*. 56, 6, 102082.

Research output: [Contribution to journal](#) > [Article](#) > [Scientific](#) > [peer-review](#)

### **DevOps in practice: A multiple case study of five companies**

Lwakatare, L. E., Kilamo, T., Karvonen, T., Sauvola, T., Heikkilä, V., Itkonen, J., Kuvaja, P., Mikkonen, T., Oivo, M. & Lassenius, C., 1 Oct 2019, In : *Information and Software Technology*. 114, p. 217-230 14 p.

Research output: [Contribution to journal](#) > [Article](#) > [Scientific](#) > [peer-review](#)

### **Are architectural smells independent from code smells? An empirical study**

Arcelli Fontana, F., Lenarduzzi, V., Roveda, R. & Taibi, D., 1 Aug 2019, In : *Journal of Systems and Software*. 154, p. 139-156 18 p.

Research output: [Contribution to journal](#) > [Article](#) > [Scientific](#) > [peer-review](#)

### **Socially inspired relaying and proactive mode selection in mmWave vehicular communications**

Moltchanov, D., Kovalchukov, R., Gerasimenko, M., Andreev, S., Koucheryavy, Y. & Gerla, M., 1 Jun 2019, In : *IEEE Internet of Things Journal*. 6, 3, p. 5172-5183 12 p.

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### **Artificial intelligence yesterday, today and tomorrow**

Jaakkola, H., Henno, J., Mäkelä, J. & Thalheim, B., 1 May 2019, *2019 42nd International Convention on Information and Communication Technology, Electronics and Microelectronics, MIPRO 2019 - Proceedings*. Skala, K., Car, Z., Pale, P., Huljenic, D., Janjic, M., Koracic, M., Sruk, V., Ribaric, S., Grbac, T. G., Butkovic, Z., Cicin-Sain, M., Skvorc, D., Mauher, M., Babic, S., Gros, S., Vrdoljak, B. & Tijan, E. (eds.). IEEE, p. 860-867 8 p.

Research output: [Chapter in Book/Report/Conference proceeding](#) > [Conference contribution](#) > [Scientific](#) > [peer-review](#)

### **Intelligent data service for farmers**

Linna, P., Narra, N. & Grönman, J., 1 May 2019, *2019 42nd International Convention on Information and Communication Technology, Electronics and Microelectronics, MIPRO 2019 - Proceedings*. Skala, K., Car, Z., Pale, P., Huljenic, D., Janjic, M., Koracic, M., Sruk, V., Ribaric, S., Grbac, T. G., Butkovic, Z., Cicin-Sain, M., Skvorc, D., Mauher, M., Babic, S., Gros, S., Vrdoljak, B. & Tijan, E. (eds.). IEEE, p. 1072-1075 4 p.

Research output: [Chapter in Book/Report/Conference proceeding](#) > [Conference contribution](#) > [Scientific](#) > [peer-review](#)

### **Teaching for virtual work**

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Research output: [Chapter in Book/Report/Conference proceeding](#) > [Conference contribution](#) > [Scientific](#) > [peer-review](#)

### **Challenges of Multi-Factor Authentication for Securing Advanced IoT Applications**

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### **Analysis of an efficient parallel implementation of active-set Newton algorithm**

San Juan Sebastián, P., Virtanen, T., Garcia-Molla, V. M. & Vidal, A. M., Mar 2019, In : Journal of Supercomputing. 75, 3, p. 1298-1309 12 p.

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

### **Challenges and recommended practices for software architecting in global software development**

Sievi-Korte, O., Beecham, S. & Richardson, I., 1 Feb 2019, In : Information and Software Technology. 106, p. 234-253 20 p.

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, Z., van der Vlugt, S., Jääskeläinen, P. & van der Linden, F., Jan 2019, In : Journal of Signal Processing Systems. 91, 1, p. 1-7

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### **Creating resource combinations based on formally described hardware interfaces**

Siltala, N., Järvenpää, E. & Lanz, M., 2019, *Precision Assembly in the Digital Age - 8th IFIP WG 5.5 International Precision Assembly Seminar, IPAS 2018, Revised Selected Papers*. Springer New York LLC, Vol. 530. p. 29-39 11 p. (IFIP Advances in Information and Communication Technology; vol. 530).

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

### **DNA Molecular Storage System: Transferring Digitally Encoded Information through Bacterial Nanonetworks**

Tavella, F., Giaretta, A., Dooley-Cullinane, T. M., Conti, M., Coffey, L. & Balasubramaniam, S., 2019, In : IEEE Transactions on Emerging Topics in Computing .

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

### **Institutional Perspectives on the Process of Enterprise Architecture Adoption**

Dang, D. & Pekkola, S., 2019, In : Information Systems Frontiers.

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### **People Counting in a Public Event—Use Case: Free-to-Ride Bus**

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

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### **Cascade of Boolean detector combinations**

Mahkonen, K., Virtanen, T. & Kämäräinen, J., Dec 2018, In : Eurasip Journal on Image and Video Processing. 2018, 61.

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

### **Toward Efficient Execution of RVC-CAL Dataflow Programs on Multicore Platforms**

Hautala, I., Boutellier, J., Nyländén, T. & Silvén, O., Nov 2018, In : Journal of Signal Processing Systems. 90, 11, p. 1507-1517 11 p.

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### **Guest Editorial Special Issue on Multimedia Big Data in Internet of Things**

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Research output: Contribution to journal › Editorial › Scientific

### **A review of connectivity map and computational approaches in pharmacogenomics**

Musa, A., Ghorai, L. S., Zhang, S. D., Glazko, G., Yli-Harja, O., Dehmer, M., Haibe-Kains, B. & Emmert-Streib, F., 1 May 2018, In : *Briefings in Bioinformatics*. 19, 3, p. 506-523 18 p.

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### **Dynamic Activities for Managing an IS-Enabled Organizational Change**

Salmimaa, T., Hekkala, R. & Pekkola, S., 1 Apr 2018, In : *Business and Information Systems Engineering*. 60, 2, p. 133-149 17 p.

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

### **Macro cellular network transition from traditional frequency range to 28 GHz millimeter wave frequency band**

Sheikh, M. U. & Lempiäinen, J., Apr 2018, In : *Wireless Networks*. 24, 3, p. 943-953 11 p.

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### **Impact of antenna radiation pattern variation on the performance of SPMA at 28 GHz**

Sheikh, M. U. & Lempiäinen, J., Feb 2018, In : *Wireless Networks*. 24, 2, p. 361-372 12 p.

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

### **Prioritizing corrective maintenance activities for android applications: An industrial case study on android crash reports**

Lenarduzzi, V., Stan, A. C., Taibi, D., Venters, G. & Windegger, M., Jan 2018, *Software Quality: Methods and Tools for Better Software and Systems - 10th International Conference, SWQD 2018, Proceedings*. Springer-Verlag Berlin Heidelberg, p. 133-143 11 p. (Lecture Notes in Business Information Processing; vol. 302).

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

### **A Practical Perspective on 5G-Ready Highly Dynamic Spectrum Management with LSA**

Masek, P., Mokrov, E., Zeman, K., Ponomarenko-Timofeev, A., Pyattaev, A., Nesterov, S., Andreev, S., Hosek, J., Samouylov, K. & Koucheryavy, Y., 2018, In : *Wireless Communications and Mobile Computing*. 2018, 11 p., 2103868.

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### **Concept design and performance evaluation of UAV-based backhaul link with antenna steering**

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### **Dynamic Resource Sharing in 5G with LSA: Criteria-Based Management Framework**

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### **Elementary math to close the digital skills gap**

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### **Fair testing and stubborn sets**

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### **How to design gamification? A method for engineering gamified software**

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### **Memory Tampering Attack on Binary GCD Based Inversion Algorithms**

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### **Mobility-Centric Analysis of Communication Offloading for Heterogeneous Internet of Things Devices**

Kozyrev, D., Ometov, A., Moltchanov, D., Rykov, V., Efrosinin, D., Milovanova, T., Andreev, S. & Koucheryavy, Y., 2018, In : Wireless Communications and Mobile Computing. 2018, 11 p., 3761075.

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### **Model-Based Dynamic Scheduling for Multicore Signal Processing**

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### **Model for efficient development of security audit criteria**

Kelo, T., Eronen, J. & Rousku, K., 2018, *Proceedings of the 17th European Conference on Cyber Warfare and Security, ECCWS 2018*. Curran Associates, p. 244-252 9 p.

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

### **How developers perceive smells in source code: A replicated study**

Taibi, D., Janes, A. & Lenarduzzi, V., 1 Dec 2017, In : Information and Software Technology. 92, p. 223-235 13 p.

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### **Outlier edge detection using random graph generation models and applications**

Zhang, H., Kiranyaz, S. & Gabbouj, M., 1 Dec 2017, In : Journal of Big Data. 4, 1, 11.

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### **Adaptive and nonlinear control of discharge pressure for variable displacement axial piston pumps**

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### **Architecting liquid software**

Gallidabino, A., Pautasso, C., Mikkonen, T., Systä, K., Voutilainen, J-P. & Taivalsaari, A., 1 Sep 2017, In : Journal of Web Engineering. 16, 5-6, p. 433-470 38 p.

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### **Open data based value networks: Finnish examples of public events and agriculture**

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### **Today is the future of yesterday; What is the future of today?**

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### **On the prospects of full-duplex military radios**

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### **Guest Editorial: Implementation Issues in System-on-Chip**

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### **A post-mortem empirical investigation of the popularity and distribution of malware files in the contemporary web-facing internet**

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### **Extending the life of virtual heritage: Reuse of TLS point clouds in synthetic stereoscopic spherical images**

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#### **A dynamical quality model to continuously monitor software maintenance**

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#### **Comparing requirements decomposition within the Scrum, Scrum with Kanban, XP, and Banana development processes**

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#### **Complex elevator system DSM-case for a DSM design sprint**

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#### **Data Flow Algorithms for Processors with Vector Extensions: Handling Actors With Internal State**

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#### **Eeny, Meeny, Miny, Mo...: A multiple case study on selecting a technique for user-interaction data collecting**

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#### **Enterprise architecture institutionalization: A tale of two cases**

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#### **Experiences from development of security audit criteria**

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#### **Experimenting traditional and modern reliability models in a 3-years european software project**

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#### **Implementation of a Multirate Resampler for Multi-carrier Systems on GPUs**

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### **Internet of Things: Opportunities for vocational education and training: Presentation of the pilot project**

Vihervaara, J. & Alapaholuoma, T., 2017, *CSEdu 2017 - Proceedings of the 9th International Conference on Computer Supported Education*. SCITEPRESS, p. 476-480 5 p.

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### **Paradoxes, conflicts and tensions in establishing master data management function**

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### **Parallel Digital Predistortion Design on Mobile GPU and Embedded Multicore CPU for Mobile Transmitters**

Li, K., Ghazi, A., Tarver, C., Boutellier, J., Abdelaziz, M., Anttila, L., Juntti, M., Valkama, M. & Cavallaro, J. R., 2017, In : *Journal of Signal Processing Systems*. 89, 3, p. 417-430 14 p.

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### **Reliability-centric analysis of offloaded computation in cooperative wearable applications**

Ometov, A., Kozyrev, D., Rykov, V., Andreev, S., Gaidamaka, Y. & Koucheryavy, Y., 2017, In : *Wireless Communications and Mobile Computing*. 2017, 9625687.

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### **Samsung and Volkswagen crisis communication in Facebook and Twitter: A comparative study**

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### **Technostress and social networking services: Uncovering strains and their underlying stressors**

Salo, M., Pirkkalainen, H. & Koskelainen, T., 2017, *Nordic Contributions in IS Research - 8th Scandinavian Conference on Information Systems, SCIS 2017, Proceedings*. Springer Verlag, p. 41-53 13 p. (Lecture Notes in Business Information Processing; vol. 294).

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### **The Web as a software platform: Ten years later**

Taivalsaari, A. & Mikkonen, T., 2017, *WEBIST 2017 - Proceedings of the 13th International Conference on Web Information Systems and Technologies*. SCITEPRESS, p. 41-50 10 p.

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### **Improving the delivery cycle: A multiple-case study of the toolchains in Finnish software intensive enterprises**

Mäkinen, S., Leppänen, M., Kilamo, T., Mattila, A-L., Laukkanen, E., Pagels, M. & Männistö, T., 1 Dec 2016, In : *Information and Software Technology*. 80, p. 1339-1351 13 p.

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### **Can e-government solutions enhance the work in municipalities?: empirical evidence from case lupapist**

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### **A coordination-based brokerage architecture for multi-cloud resource markets**

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

**Special Issue on Embedded Computer Systems: Architectures, Modeling and Simulation**

McAllister, J., Guevorkian, D., Jeschke, H. & Sima, M., 2014, In : International Journal of Parallel Programming. 43, 1

Research output: Contribution to journal › Special issue › Scientific › peer-review

**Federation lifecycle management incorporating coordination of bio-inspired self-management processes**

Meskill, B., Balasubramaniam, S., Brennan, R., Feeney, K. & Jennings, B., Dec 2013, In : JOURNAL OF NETWORK AND SYSTEMS MANAGEMENT. 21, 4, p. 650-676 27 p.

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

**[COMMODE] a large-scale database of molecular descriptors using compounds from PubChem**

Dander, A., Mueller, L. A. J., Gallasch, R., Pabinger, S., Emmert-Streib, F., Graber, A. & Dehmer, M., 13 Nov 2013, In : Source Code for Biology and Medicine. 8, 22.

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

**Towards generic embedded multiprocessing for RVC-CAL dataflow programs**

Boutellier, J. & Silvén, O., Nov 2013, In : Journal of Signal Processing Systems. 73, 2, p. 137-142 6 p.

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

**An evaluation of the virtual curvature with the StickGrip haptic device: A case study**

Evreinova, T. V., Evreinov, G. & Raisamo, R., Jun 2013, In : UNIVERSAL ACCESS IN THE INFORMATION SOCIETY. 12, 2, p. 161-173 13 p.

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

**Integration of dataflow-based heterogeneous multiprocessor scheduling techniques in GNU radio**

Zaki, G. F., Plishker, W., Bhattacharyya, S. S., Clancy, C. & Kuykendall, J., Feb 2013, In : Journal of Signal Processing Systems. 70, 2, p. 177-191 15 p.

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

**Automatic hierarchical discovery of quasi-static schedules of RVC-CAL dataflow programs**

Boutellier, J., Raulet, M. & Silvén, O., 2013, In : Journal of Signal Processing Systems. 71, 1, p. 35-40 6 p.

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

**Multidimensional sequence classification based on fuzzy distances and discriminant analysis**

Iosifidis, A., Tefas, A. & Pitas, I., 2013, In : IEEE Transactions on Knowledge and Data Engineering. 25, 11, p. 2564-2575 12 p.

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

**Multi-view human action recognition: A survey**

Iosifidis, A., Tefas, A. & Pitas, I., 2013, *Proceedings - 2013 9th International Conference on Intelligent Information Hiding and Multimedia Signal Processing, IIH-MSP 2013*. IEEE COMPUTER SOCIETY PRESS, p. 522-525 4 p.

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

**Parameterized scheduling of topological patterns in signal processing dataflow graphs**

Wang, L. H., Shen, C. C., Wu, S. & Bhattacharyya, S. S., 2013, In : Journal of Signal Processing Systems. 71, 3, p. 275-286 12 p.

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

**Representative class vector clustering-based discriminant analysis**

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

**WeSlide: Gestural text entry for elderly users of interactive television**

Godard, N., Pecci, I. & Isokoski, P., 2013, *Proceedings of the 11th European Conference on Interactive TV and Video, EuroITV 2013*. p. 55-58 4 p.

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**Barriers to task-based information access in molecular medicine**

Kumpulainen, S. & Järvelin, K., Jan 2012, In : JOURNAL OF THE ASSOCIATION FOR INFORMATION SCIENCE AND TECHNOLOGY. 63, 1, p. 86-97 12 p.

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#### **Characterizing trustworthy digital rights exporting**

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

#### **Mapping parameterized cyclo-static dataflow graphs onto configurable hardware**

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

#### **Novel approaches to crawling important pages early**

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

#### **Performance Comparison of Decision Fusion Strategies in BMMF-based Image Quality Assessment**

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#### **Revenue models of application developers in android market ecosystem**

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#### **Sparse nonparametric topic model for transfer learning**

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

#### **Variation in noun and pronoun frequencies in a sociohistorical corpus of English**

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#### **Overview of the MPEG reconfigurable video coding framework**

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



#### **Quasi-static scheduling of CAL actor networks for reconfigurable video coding**

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#### **Exploiting statically schedulable regions in dataflow programs**

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#### **Estimating topographic heights with the StickGrip haptic device**

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#### **Interpretation of ambiguous images inspected by the StickGrip device**

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#### **Op2A: Assessing the quality of the portal of open source software products**

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#### **Openness as a method for game evolution**

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

#### **Periodic finite state controllers for efficient POMDP and DEC-POMDP planning**

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

#### **Social networking services as a facilitator for scientists' sharing activities**

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

#### **Topological patterns for scalable representation and analysis of dataflow graphs**

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#### **Using the entity-attribute-value model for olap cube construction**

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**Applying SCRUM in an OSS development process: An empirical evaluation**

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**Information interaction in molecular medicine: Integrated use of multiple channels**

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**Towards certifying the testing process of open-source software: New challenges or old methodologies?**

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**Global information processing in gene networks: Fault tolerance**

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