MergeTree: A Fast Hardware HLBVH Constructor for Animated Ray Tracing. / Viitanen, Timo; Koskela, Matias; Jääskeläinen, Pekka; Kultala, Heikki; Takala, Jarmo.
Research output: Scientific - peer-review › Article

Ethics as a skill of software engineer? / Järvinen, Hannu-Matti.
Research output: Scientific - peer-review › Conference contribution

Towards Framework for Choosing 360-degree Video SDK. / Luoto, Antti.
Research output: Scientific - peer-review › Conference contribution

Fast Hardware Construction and Refitting of Quantized Bounding Volume Hierarchies. / Viitanen, Timo; Koskela, Matias; Jääskeläinen, Pekka; Immonen, Kalle; Takala, Jarmo.
Research output: Scientific - peer-review › Article

Nursing students’ experiential learning processes using an online 3D simulation game. / Koivisto, Jaana-Maija; Niemi, Hannele; Multisilta, Jari; Eriksson, Elina.
Research output: Scientific - peer-review › Article

Project types and industrial collaboration in project-based learning. / Systä, Kari; Vuori, Matti; Järvinen, Hannu-Matti; Ahtee, Tero; Sten, Harri.
Research output: Scientific - peer-review › Conference contribution

Low-energy algorithm for self-controlled wireless sensor nodes. / Muzaffar, Ahmad ; Saari, Mika; Sillberg, Pekka ; Rantanen, Petri ; Soini, Jari ; Kudora, Tadahiro.
Research output: Scientific - peer-review › Conference contribution

Industrial impact on topics and types of Master's theses: Empirical study of software engineering theses made in 1990-2016. / Järvinen, Hannu-Matti; Mikkonen, Tommi.
Research output: Scientific - peer-review › Conference contribution

Integrating mobile orienteering to team forming activity in a software engineering course. / Vääätäjä, Heli; Ahtinen, Aino.
Research output: Scientific - peer-review › Conference contribution

Longitudinal study on text entry by gazing and smiling. / Tuisku, Outi; Rantanen, Ville; Surakka, Veikko.
Research output: Scientific - peer-review › Conference contribution

Design-inclusive UX research: design as a part of doing user experience research. / Vermeeren, Arnold P.O.S.; Roto, Virpi; Väänänen, Kaisa.
Research output: Scientific - peer-review › Article
**Pointing and Selecting with Facial Activity.** / Tuisku, Outi; Rantanen, Ville; Spakov, Oleg; Surakka, Veikko; Lekkala, Jukka. In: Interacting with Computers, Vol. 28, No. 1, 01.2016, p. 1-12. Research output: Scientific - peer-review › Article


**Exploring ScrumBut—An empirical study of Scrum anti-patterns.** / Eloranta, Veli-Pekka; Koskimies, Kai; Mikkonen, Tommi. How to Evaluate the Social Effects and User Experience of Systems Enhancing Collocated Interactions? / Olsson, Thomas; Jarusriboonchai, Pradthana; Paasovaara, Susanna; Ojala, Jarno; Olshannikova, Ekaterina; Malapaschas, Aris; Väänänen, Kaisa. Workshop of Proxemic Mobile Collocated Interaction, in conjunction with CHI’16. 2016. Research output: Professional › Conference contribution

**How to Evaluate the Social Effects and User Experience of Systems Enhancing Collocated Interactions?** / Olsson, Thomas; Jarusriboonchai, Pradthana; Paasovaara, Susanna; Ojala, Jarno; Olshannikova, Ekaterina; Malapaschas, Aris; Väänänen, Kaisa. Workshop of Proxemic Mobile Collocated Interaction, in conjunction with CHI’16. 2016. Research output: Professional › Conference contribution


Towards Agile Enterprise Data Warehousing. / Puonti, Mikko; Lehtonen, Timo; Luoto, Antti; Aaltonen, Timo; Aho, Timo.


Dual-Mode Congestion Control Mechanism for Video Service. / Vihervaara, Juha; Loula, Pekka.

Priority Queue Classes with Priority Update. / Rintala, Matti; Valmari, Antti.

Rapid Customization of Image Processors Using Halide. / Korhonen, Ville; Jääskeläinen, Pekka; Koskela, Matias; Viitanen, Timo; Takala, Jarmo.

Editorial: is Game-Based Math Learning Finally Coming of Age? / Kiili, Kristian; Devlin, Keith; Multisilta, Jari.
In: International Journal of Serious Games, Vol. 2, No. 4, 1, 08.12.2015.

Improving Code Density with Variable Length Encoding Aware Instruction Scheduling. / Kultala, Heikki; Viitanen, Timo; Jääskeläinen, Pekka; Helkala, Janne; Takala, Jarmo.

Integer Linear Programming-Based Scheduling for Transport Triggered Architectures. / Äijö, Tomi; Jääskeläinen, Pekka; Elomaa, Tapio; Kultala, Heikki; Takala, Jarmo.

Large-Scale Water Simulation in Games. / Kellomäki, Timo.
Tampere University of Technology, 2015. 91 p. (Tampere University of Technology. Publication; Vol. 1354).

Istujat liikkumaan! / Ahtinen, Aino.
In: Tampereen Kauppakamarilehti, No. 6, 12.2015, p. 8.

Survey and evaluation of neural computation models for bio-integrated systems. / Christophe, Francois; Andalibi, Vafa; Laukarinen, Teemu; Mikkonen, Tommi; Koskimies, Kai.
"Free" Innovation Environments: Lessons learned from the Software Factory Initiatives. / Taibi, Davide; Lenarduzzi, Valentina; Fagerholm, Fabian; Münch, Jürgen; Ovais Ahmad, Muhammad; Liukkunen, Kari; Pietinen, Sami; Tukiainen, Markku; Lunesu, Ilaria; Matta, Martina; Fernández-Sánchez, Carlos; Garbajosa, Juan; Systä, Kari.
Research output: Scientific - peer-review » Conference contribution

Integrating UX Work in Agile Enterprise Software Development. / Kuusinen, Kati.
Tampere University of Technology, 2015. 296 p. (Tampere University of Technology. Publication; Vol. 1339).
Research output: Collection of articles » Doctoral Thesis

MergerTree: a HLBVH Constructor for Mobile Systems. / Viitanen, Timo; Koskela, Matias; Jääskeläinen, Pekka; Kultala, Heikki; Takala, Jarmo.
Research output: Scientific - peer-review » Conference contribution

Refactoring - a Shot in the Dark? / Leppänen, Marko; Mäkinen, Simo; Lahtinen, Samuel; Sievi-Korte, Outi; Tuovinen, Antti-Pekka; Männistö, Tomi.
Research output: Scientific - peer-review » Article

Exercise apps cure the sitting disease. / Ahtinen, Aino.
Research output: General public » Comment/debate

LOGDIG Log File Analyzer for Mining Expected Behavior from Log Files. / Heikkinen, Esa; Hämäläinen, Timo D.
Research output: Scientific - peer-review » Conference contribution

Semantics analyzing expression editors in IP-XACT design tool Kactus2. / Teuho, Mikko; Pekkarinen, Esko; Hämäläinen, Timo D.
Research output: Scientific - peer-review » Conference contribution

Collecting issue management data for analysis with a unified model and API descriptions. / Hylli, Otto; Mattila, Anna-Liisa; Systä, Kari.
Research output: Scientific - peer-review » Conference contribution

Research output: Scientific - peer-review » Conference contribution

Mobile Applications to Support Physical Exercise - Motivational Factors and Design Strategies. / Ahtinen, Aino.
Research output: Collection of articles » Doctoral Thesis
Visualizing Big Data with Augmented and Virtual Reality: Challenges and Research Agenda. / Olshannikova, Ekaterina; Ometov, Aleksandr; Koucheryavy, Yevgeni; Olsson, Thomas.
Research output: Scientific - peer-review › Review Article

Global vs. Local - Experiences from a Distributed Software Project Course Using Agile Methodologies. / Sievi-Korte, Outi; Systä, Kari; Jeltsvold, Rune.
Research output: Scientific - peer-review › Conference contribution

Suomalaisen digitaalisen television aikakausi on huomattavasti oletettua monipuolisempi. / Tuomi, Pauliina.
Research output: Scientific › Article

Continuous User Experience Development. / Kuusinen, Kati.
Research output: Scientific - peer-review › Conference contribution

The Next Level of User Experience of Cloud Storage Services: Supporting Collaboration with Social Features. / Palviainen, Jarmo; Luoto, Antti; Terho, Henri; Hylli, Jaakko; Sievi-Korte, Outi; Systä, Kari.
Research output: Scientific - peer-review › Conference contribution

Augmenting Technology Trees: Automation and Tool Support. / Heinimäki, Teemu J.; Elomaa, Tapio.
Research output: Scientific - peer-review › Conference contribution

Unified Model for Software Engineering Data. / Mattila, Anna-Liisa; Luoto, Antti; Terho, Henri; Hylli, Jaakko; Sievi-Korte, Outi; Systä, Kari.
Research output: Scientific - peer-review › Conference contribution

Overcoming challenges in agile user experience work: Cross-case analysis of two large software organizations. / Kuusinen, Kati.
Research output: Scientific - peer-review › Conference contribution

Surveys of daily information security of citizens in Finland. / Koskinen, Jukka A.
Research output: Scientific - peer-review › Conference contribution

Understanding the most influential user experiences in successful and unsuccessful technology adoptions. / Partala, Timo; Saari, Timo.
Research output: Scientific - peer-review › Article
Mashing Up Software Issue Management, Development, and Usage Data. / Mattila, Anna-Liisa; Lehtonen, Timo; Terho, Henri; Mikkonen, Tommi; Systä, Kari.
Research output: Scientific - peer-review › Conference contribution

Gathering useful programming data; Analysis and insights from real-time collaborative editing. / Rantala, M.; Soini, J.; Kilamo, T.
Research output: Scientific - peer-review › Conference contribution

Data Intensive Computing: From Modelling to Implementation. / Jääskeläinen, Pekka; Boutellier, Jani.
Research output: Scientific › Editorial

Collaborative cloud-based management of home networks. / Silverajan, Bilhanan; Luoma, Juha-Pekka; Vajaranta, Markku; Räpuro, Riku.
Research output: Scientific - peer-review › Conference contribution

E-learning of ethics, awareness, hacking and research by information security majors. / Koskinen, Jukka Antero.
Research output: Scientific - peer-review › Conference contribution

Inviting the Audience: – Interactive, Participatory, and Social Television in Finland. / Tuomi, Pauliina.
Research output: Collection of articles › Doctoral Thesis

Embedded Multi-Core Systems Dedicated to Dynamic Dataflow Programs. / Yviquel, Herve; Sanchez, Alexandre; Jääskeläinen, Pekka; Takala, Jarmo; Raulet, Mickael; Casseau, Emmanuel.
Research output: Scientific - peer-review › Article

On the Socio-Technical Dependencies in Free/Libre/Open Source Software Projects. / Syeed, M M Mahbubul.
Tampere University of Technology, 2015. (Tampere University of Technology. Publication; Vol. 1300).
Research output: Collection of articles › Doctoral Thesis

Efficient Use of Teaching Technologies with Programming Education. / Ahoniemi, Tuukka.
Tampere University of Technology, 2015. 133 p. (Tampere University of Technology. Publication; Vol. 1301).
Research output: Collection of articles › Doctoral Thesis

Research output: Collection of articles › Doctoral Thesis

Towards Open Data for Personal Web Tasking. / Ruokonen, Anna; Hylli, Otto; Lahtinen, Samuel.
Research output: Scientific - peer-review › Conference contribution
From the Internet of Things to the Internet of People. / Miranda, Javier; Mäkitalo, Niko; Garcia-Alonso, Jose; Berrocal, Javier; Mikkonen, Tommi; Canal, Carlos; Murillo, Juan M.
In: IEEE Internet Computing, Vol. 19, No. 2, 01.03.2015, p. 40-47.
Research output: Scientific - peer-review › Article

The highways and country roads to continuous deployment. / Leppänen, Marko; Mäkinen, Simo; Pagels, Max; Eloranta, Veeti-Pekka; Itkonen, Juha; Mäntylä, Mika V.; Männistö, Tomi.
Research output: Scientific - peer-review › Article

A Comparison of Methods to Move Visual Objects Between Personal Mobile Devices in Different Contexts of Use. / Jokela, Tero; Ojala, Jarno; Grassel, Guido; Pippio, Petri; Olsson, Thomas.
Research output: Scientific - peer-review › Conference contribution

A conceptual model towards the scaffolding of learning experience. / Arnab, Sylvester; Ger, Pablo Moreno; Lim, Theodore; Lamaras, Petros; Hendrix, Maurice; Killi, Kristian; Hauge, Jannicke Baalstad; Ninaus, Manuel; de Freitas, Sara; Mazzetti, Alessandro; Dahlbom, Anders; Degano, Cristiana; Stanescu, Ioana; Riveiro, Maria.
Research output: Scientific - peer-review › Conference contribution

A Cross-Cultural and Gender-Based Perspective for Online Security: Exploring Knowledge, Skills and Attitudes of Higher Education Students. / Chaudhary, Sunil; Zhao, Yan; Berki, Eleni; Valtanen, Juri; Li, Linfeng; Helenius, Marko; Mystakidis, Stylianos.
Research output: Scientific - peer-review › Article

A Design Framework Enhancing Developer Experience in Collaborative Coding Environment. / Palviainen, Jarmo; Kilamo, Terhi; Koskinen, Johannes; Lautamäki, Janne Tuomas; Mikkonen, Tommi; Nieminen, Antti.
Research output: Scientific - peer-review › Conference contribution

A Diary Study on Combining Multiple Information Devices in Everyday Activities and Tasks. / Jokela, Tero; Ojala, Jarno; Olsson, Thomas.
Research output: Scientific - peer-review › Conference contribution

Animal Welfare as a Design Goal in Technology Mediated Human-Animal Interaction. / Väätäjä, Heli.
Research output: Scientific - peer-review › Conference contribution

Applying finite state process algebra to formally specify a computational model of security requirements in the key2phone-mobile access solution. / Chaudhary, Sunil; Li, Linfeng; Berki, Eleni; Helenius, Marko; Keila, Juha; Turunen, Markku.
Research output: Scientific - peer-review › Conference contribution

Assessment of social media skills among vocational teachers in Finland. / Linna, P.; Aramo-Immonen, H.; Saari, M.; Turunen, J.; Jussila, J.; Joel-Edgar, S.; Huhtala, M.
Research output: Scientific - peer-review › Conference contribution
Augmenting food with information. / Henze, Niels; Olsson, Thomas; Schneegass, Stefan; Sahami, Alireza; Väänänen-Vainio-Mattila, Kaisa.
Research output: Scientific › peer-review › Conference contribution

Benefits for supplier and customer with the help of logged usage data. / Väänänen-Vainio-Mattila, Kaisa.
Research output: Professional › Chapter

Characterizing Context of Use in Mobile Work. / Vääätäjä, Heli.
Research output: Scientific › peer-review › Conference contribution

Cloud Technologies for the Internet of Things: Defining a Research Agenda Beyond the Expected Topics. / Taivalsaari, Antero; Mikkonen, Tommi.
Research output: Scientific › peer-review › Conference contribution

Code Density and Energy Efficiency of Exposed Datapath Architectures. / Jääskeläinen, Pekka; Kultala, Heikki; Viitanen, Timo; Takala, Jarmo.
Research output: Scientific › peer-review › Article

Collaboration, distribution and culture - challenges for communication. / Jaakkola, H.; Henno, J.; Thalheim, B.; Mäkelä, J.
Collaboration, distribution and culture - challenges for communication. / Jaakkola, H.; Henno, J.; Thalheim, B.; Mäkelä, J.
Research output: Scientific › peer-review › Conference contribution

Content Sharing Building Social User Experiences. / Ojala, Jarno.
Research output: Scientific › peer-review › Conference contribution

Cross-Cultural Design of Mobile Mathematics Learning Service for South African Schools. / Vainio, Teija; Walsh, Tanja; Varsaluoma, Jari.
In: IADIS International Journal on WWW/Internet, Vol. 12, No. 1, 2015, p. 81-93.
Research output: Scientific › peer-review › Article

Cross-cultural issues in working with users in the design of interactive systems. / Petrie, Helen; Walsh, Tanja; Odutola, Olufunmilayo; Ang, Lei.
Research output: Scientific › peer-review › Conference contribution

CueSense: a Wearable Proximity-Aware Display Enhancing Encounters. / Jarusriboonchai, Pradthana; Olsson, Thomas; Prabhu, Vikas; Väänänen-Vainio-Mattila, Kaisa.
Cultural influence on online community use: A cross-cultural study on online exercise diary users of three nationalities. / Malinen, Sanna; Nurkka, Piia.
Research output: Scientific - peer-review › Article

Cultural influence on online community use: A cross-cultural study on online exercise diary users of three nationalities. / Malinen, Sanna; Nurkka, Piia.
Research output: Scientific - peer-review › Article

Culture-Aware Web Information System Development. / Jaakkola, Hannu; Thalheim, Bernhard.
Research output: Scientific - peer-review › Conference contribution

Data collector service - practical approach with embedded linux. / Saari, M.; Sillberg, P.; Rantanen, P.; Soini, J.; Fukai, H.
Research output: Scientific - peer-review › Conference contribution

Data Correction for Seven Activity Trackers based on Regression Models. / Andalibi, Vafa; Honko, Harri; Christophe, Francois; Viik, Jari.
Research output: Scientific - peer-review › Conference contribution

Data driven ecosystem - Perspectives and problems. / Jaakkola, H.; Henno, J.; Soini, J.
Research output: Scientific - peer-review › Conference contribution

Delayed key exchange for constrained smart devices. / Kannisto, Joona; Heikkinen, Seppo; Slavov, Kristian; Harju, Jarmo.
Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics). Springer Verlag, 2015. p. 12-26 (Lecture Notes in Computer Science; Vol. 8629).
Research output: Scientific - peer-review › Conference contribution

Designing an Unobtrusive Analytics Framework for Monitoring Java Applications. / Suonsyrjä, Sampo; Mikkonen, Tommi.
Research output: Scientific - peer-review › Conference contribution

Designing Mobile Devices Encouraging and Supporting Collocated Interactions. / Jarusriboonchai, Pradthana.
Research output: Scientific - peer-review › Conference contribution
Design Patterns for Model-Driven Development. / Vepsäläinen, Timo; Kuikka, Seppo.
Research output: Scientific - peer-review › Article

Developing Novel Services for the Railway Station Area through Experience-Driven Design. / Ojala, Jarno; Korhonen, Hannu; Laaksosen, Jari; Väänänen, Kaisa; Järvi, Antti; Raisamo, Roope; Mäkelä, Ville.
In: ID&A Interaction Design & Architecture(S), Vol. 25, No. 1, 2015, p. 73-84.
Research output: Scientific - peer-review › Article

Do we know how difficult the rainfall problem is? / Seppälä, Otto; Ihantola, Petri; Isohanni, Essi; Sorva, Juha; Vihavainen, Arto.
Research output: Scientific - peer-review › Conference contribution

Early Product Design in Startups: Towards a UX Strategy. / Hokkanen, Laura; Kuusinen, Kati; Väänänen, Kaisa.
Research output: Scientific - peer-review › Conference contribution

EDB: A Multi-Master Database for Liquid Multi-Device Software. / Koskimies, O.;Wikman, J.; Mikola, T.; Taivalsaari, A.
Research output: Scientific - peer-review › Conference contribution

Educational Data Mining and Learning Analytics in Programming: Literature Review and Case Studies. / Ihantola, Petri; Vihavainen, Arto; Ahadi, Ali Reza; Butler, Matthew; Börster, Jürgen; Edwards, Stephen H.; Isohanni, Essi; Korhonen, Ari; Petersen, Andrew; Rivers, Kelly; Rubio, Miguel Angel; Sheard, Judy; Skupas, Bronius; Spacco, Jaime; Szabo, Claudia; Toll, Daniel.
Research output: Scientific - peer-review › Conference contribution

Effect of Carouseling on Angular Rate Sensor Error Processes. / Collin, Jussi; Kirkko-Jaakkola, Martti; Takala, Jarmo.
Research output: Scientific - peer-review › Article

Empowering Industrial Maintenance Personnel with Situationally Relevant Information using Semantics and Context Reasoning. / Hästbacka, David; Aarnio, Pekka; Vyatkin, Valeriy; Kuikka, Seppo.
Research output: Scientific - peer-review › Conference contribution

Experience-Driven Design of Ambiences for Future Pop Up Workspaces. / Ahtinen, Aino; Poutanen, Jenni; Vuolle, Maiju; Väänänen, Kaisa; Peltoniemi, Sanna.
Research output: Scientific - peer-review › Conference contribution

Explorative study of teaching programming to vocational teachers in Finland. / Saari, M.; Turunen, J.; Linna, P.; Aramo-Immonen, H.; Huhtala, M.; Joel-Edgar, S.
Research output: Scientific - peer-review › Conference contribution

Exploring Attitudes, Knowledge and Competencies for Security Technology: A Cross-Cultural Survey in Higher Education. / Chaudhary, Sunil; Zhao, Yan; Berki, Eleni; Valtanen, Juri; Li, Linfeng; Helenius, Marko; Mystakidis, Stylianos; Nalam, Thrushna; Thapa, Rajendra Bahadur.
Faster 128-EEA3 and 128-EIA3 Software. / Avanzi, Roberto; Brumley, Billy Bob.
Research output: Scientific - peer-review › Conference contribution

Faster Software for Fast Endomorphisms. / Brumley, Billy Bob.
Research output: Scientific - peer-review › Conference contribution

From Apps to Liquid Multi-Device Software. / Taivalsaari, Antero; Mikkonen, Tommi.
Research output: Scientific - peer-review › Article

From Mobile to Wearable: Using Wearable Devices to Enrich Mobile Interaction. / Schneegass, Stefan; Mayer, Sven; Olsson, Thomas; Van Laerhoven, Kristof.
Research output: Scientific - peer-review › Conference contribution

Getting started with the experience design process. / Varsaluoma, Jari; Vääätjä, Heli; Kaasinen, Eija; Karvonen, Hannu; Lu, Yichen.
Research output: Scientific - peer-review › Conference contribution

Guest Editor: Special Issue on Advances in Tools, Techniques and Practices for Multimedia QoE. / Jumisko-Pyykkö, Satu (Editor).
Research output: Scientific - peer-review › Anthology

High-Level Synthesis Design Flow for HEVC Intra Encoder on SoC-FPGA. / Sjövall, Panu; Virtanen, Janne; Vanne, Jarno; Hämäläinen, Timo D.
Research output: Scientific - peer-review › Conference contribution

Identiteetin- ja pääsynhallinta. / Linden, Mikael.
Research output: Professional › Commissioned report

Increasing user and customer understanding through rapid ethnography in emerging markets. / Vääätjä, Heli; Haggrén, Jaakko.
Research output: Professional › Chapter

Indoor Localization Methods Using Dead Reckoning and 3D Map Matching. / Bojja, Jayaprasad; Kirkko-Jaakkola, Martti; Collin, Jussi; Takala, Jarmo.
Research output: Scientific - peer-review › Article
In Search of the Emotional Design Effect in Programming. / Haaranen, Lassi; Ihantola, Petri; Sorva, Juha; Vihavainen, Arto.
Research output: Scientific - peer-review › Conference contribution

Interaction and humans in internet of things. / Turunen, Markku; Sonntag, Daniel; Engelbrecht, Klaus-Peter; Olsson, Thomas; Schnelle-Walka, Dirk; Lucero, Andrés.
Research output: Scientific - peer-review › Conference contribution

Internal Marketplace as a Mechanism for Promoting Software Reuse. / Ripatti, Maria; Kilamo, Terhi; Salli, Karri-Tuomas; Mikkonen, Tommi.
Research output: Scientific - peer-review › Conference contribution

Jossakin vuoti öljy, muualla tihkuivat tiedot - etiikka katoavien rajojen ja suurten skandaalien aikakaudella. / Lilja, Kari.
Research output: Scientific - peer-review › Chapter

Kvazaar HEVC encoder for Efficient Intra Coding. / Viitanen, Marko; Koivula, Ari; Lemmetti, Ari; Vanne, Jarno; Hämäläinen, Timo D.
Research output: Scientific - peer-review › Conference contribution

Lean Startup Meets Software Product Lines: Survival of the Fittest or Letting Products Bloom? / Terho, Henri; Suonsyrjä, Sampo; Jaaksi, Ari; Mikkonen, Tommi; Kazman, Rick; Chen, Hong-Mei.
Research output: Scientific - peer-review › Conference contribution

Learning Analytics Architecture to Scaffold Learning Experience through Technology-based Methods. / Baalsrud Hauge, Jannicke; Stanescu, Ioana; Arnab, Sylvester; Moreno Ger, Pablo; Lim, Theodore; Serrano-Laguna, Angel; Lammers, Petros; Hendrix, Maurice; Kilii, Kristian Juha Mikael; Ninaus, Manuel; Mazzetti, Alessandro; Dahlbom, Anders; Degano, Cristiana.
Research output: Scientific - peer-review › Article

Lightweight Immaterial Particle Displays with Mid-Air Tactile Feedback. / Sand, Antti; Rakkolainen, Ismo; Isokoski, Poika; Raisamo, Roope; Palovuori, Karri.
IEEE international symposium on haptic audio-visual environments and games. 2015. p. 30-34.
Research output: Scientific - peer-review › Conference contribution

Localization of Storyboards for Cross-cultural User Studies. / Walsh, Tanja; Petrie, Helen; Zhang, Anqi.
Research output: Scientific - peer-review › Conference contribution

Managing software engineering competences with domain ontology for customer and team profiling and training. / Robal, T.; Ojastu, D.; Kalja, A.; Jaakkola, H.
Research output: Scientific - peer-review › Conference contribution
Research output: Collection of articles › Doctoral Thesis

Research output: Scientific - peer-review › Conference contribution

Research output: Scientific - peer-review › Conference contribution

Optimal operation of a three camera system on a four-wheel robot. / Raunio, Jukka-Pekka; Ritala, Risto; Välimäki, Tuomas. IMEKO XXI World Congress, Fundamental and Applied Metrology, Proceedings, August 31-September 4, 2015, Prague, Czech Republic. 2015. p. 968-973.
Research output: Scientific - peer-review › Conference contribution

Pattern recognition with Spiking Neural Networks: a simple training method. / Christophe, Francois; Mikkonen, Tommi; Andalibi, Vafa; Koskimies, Kai; Laukkarinen, Teemu.
Research output: Scientific - peer-review › Conference contribution

Research output: Scientific - peer-review › Chapter

Phishing knowledge based user modelling in software design. / Li, Linfeng; Nummenmaa, Timo; Berki, Eleni; Helenius, Marko. Proceedings of the 14th Symposium on Programming Languages and Software Tools. 2015. p. 221-235 (CEUR Workshop Proceedings; Vol. 1525).
Research output: Scientific - peer-review › Conference contribution

Research output: Scientific - peer-review › Conference contribution

pocl: A Performance-Portable OpenCL Implementation. / Jääskeläinen, Pekka; De La Lama, Carlos Sánchez; Schnetter, Erik; Raiskila, Kalle; Takala, Jarmo; Berg, Heikki.
Research output: Scientific - peer-review › Article

Proceedings of the 25th International Conference on Information Modelling and Knowledge Bases (EJC 2015), 8-12 June, 2015, Maribor, Slovenia. / Welzer, Tatjana (Editor); Höbl, Marko (Editor); Kiyoki, Yasushi (Editor); Thalheim, Bernhard (Editor); Jaakkola, Hannu (Editor).
Project- and product-oriented course. / Henno, J.; Jaakkola, H.; Mäkelä, J.
Research output: Scientific - peer-review › Conference contribution

Requirements, Architecture, and Quality in a Mission-Critical System: 12 Lessons Learned. / Koski, Aapo; Mikkonen, Tommi.
Research output: Scientific - peer-review › Conference contribution

Rolling Out a Mission Critical System in an Agilish Way: Reflections on Building a Large-Scale Dependable Information System for Public Sector. / Aapo, Koski; Mikkonen, Tommi.
Research output: Scientific - peer-review › Conference contribution

Service Architecture and Interface Design for Mobile Machine Parameter Optimization System. / Kannisto, Petri; Hästbacka, David; Vilkko, Matti; Kuikka, Seppo.
Research output: Scientific - peer-review › Article

Smartphones as Personal Profile Providers: Enhancing Mobile App Architectures. / Berrocal, Javier; Canal, Carlos; Garcia-Alonso, Jose; Mäkitalo, Niko; Mikkonen, Tommi; Miranda, Javier; Murillo, Juan M.
Research output: Scientific - peer-review › Conference contribution

Social Displays on Mobile Devices: Increasing Collocated People's Awareness of the User's Activities. / Jarusriboonchai, Pradhanan; Olsson, Thomas; Väänänen-Vainio-Mattila, Kaisa.
Research output: Scientific - peer-review › Conference contribution

Sosiaalinen media ja digitalisaatio. / Linna, Petri.
Research output: Professional › Conference contribution

Spicing Up Open Source Development with a Touch of Crowdsourcing. / Kilamo, Terhi; Rahikkala, Jurka; Mikkonen, Tommi.
Research output: Scientific - peer-review › Conference contribution

Supplier's Expectations on Usage Data Analytics of Complex Industrial Systems. / Vääntäjä, Heli; Heimonen, Tomi; Tiitinen, Katriina; Hakulinen, Jaakko; Turunen, Markku.
Research output: Scientific - peer-review › Conference contribution

Teaching Distributed Agile Development to Software Professionals: A Flexible Approach. / Vogel, Bahtijas; Kilamo, Terhi; Kurti, Arianit.
Research output: Scientific - peer-review › Conference contribution
Techniques for Genetic Software Architecture Design. / Sievi-Korte, Outi; Koskimies, Kai; Mäkinen, Erkki.
Research output: Scientific - peer-review › Article

Technologies for databases change management. / Jannaschk, Kai; Jaakkola, Hannu; Thalheim, Bernhard.
New Trends in Database and Information Systems II. Selected papers of the 18th East European Conference on
Advances in Databases and Information Systems and Associated Satellite Events, ADBIS 2014, Ohrid, Macedonia,
September 7-10, 2014, Proceedings II. ed. / Nick Bassetiades; Mirjana Ivanovic; Margita Kon-Popovska; Yannis
(Advances in Intelligent Systems and Computing; Vol. 312).
Research output: Scientific - peer-review › Conference contribution

Teollista Internetiä työkoneissa – palveluarkkitehtuuri suorituskyvyn optimointiin. / Kannisto, Petri; Hästbacka, David;
Kuikka, Seppo.
(SAS julkaisusarja; No. 44).
Research output: Scientific - peer-review › Conference contribution

The Fuzzy Front End of Experience Design: Workshop Proceedings. / Kaasinen, Eija; Karvonen, Hannu; Lu, Yichen;
Varsaluoma, Jari; Vääätäjä, Heli.
Teknologian tutkimuskeskus VTT Oy , 2015. 76 p.
Research output: Scientific - peer-review › Conference contribution

The Fuzzy Front End of Experience Design: Eliciting and Communicating Experience Goals. / Varsaluoma, Jari; Vääätäjä,
Heli; Kaasinen, Eija; Karvonen, Hannu; Lu, Yichen.
OzCHI '15 - Proceedings of the Annual Meeting of the Australian Special Interest Group for Computer Human Interaction
Research output: Scientific - peer-review › Conference contribution

The Social Developer – Now, Then, and Tomorrow. / Kilamo, Terhi ; Leppänen, Marko ; Mikkonen, Tommi .
Research output: Scientific - peer-review › Conference contribution

The spatial presence experience scale (SPES): A short self-report measure for diverse media settings. / Hartmann, Tilo;
Wirth, Werner; Schramm, Holger; Klimmt, Christoph; Vorderer, Peter; Gysper, Andre; Böcking, Saskia; Ravaja, Niklas;
Laarni, Jari; Saari, Timo; Gouveia, Feliz; Sacau, Ana.
Research output: Scientific - peer-review › Article

Three Dimensional Volume Managers Replacing Window Managers in Augmented Reality Application Paradigm. / Peuhkurinen, Antti ; Mikkonen, Tommi .
Research output: Scientific - peer-review › Conference contribution

To UML or not to UML? – Empirical Study on the Approachability of Software Architecture Diagrams. / Eloranta, Veli-
Pekka; Isohanni, Essi; Lahtinen, Samuel; Sievi-Korte, Outi .
Research output: Scientific - peer-review › Conference contribution

Towards an ideal software engineering project course. / Ahtee, Tero; Tiusanen, Olli .
Research output: Scientific - peer-review › Conference contribution
Towards blended learning: A case study. / Linna, P.; Keto, H.; Mäkinen, T.
MIPRO 2015, 38th International Convention on Information and Communication Technology, Electronics and
Microelectronics, May 25-29, 2015, Opatija, Croatia. Croatian Society for Information and Communication Technology,
Research output: Scientific - peer-review › Conference contribution

Towards Deeper Understanding of User Experience with Ubiquitous Computing Systems: Systematic Literature Review
and Design Framework. / Väänänen-Vainio-Mattila, Kaisa; Olsson, Thomas; Häkkilä, Jonna.
Human-Computer Interaction – INTERACT 2015: 15th IFIP TC 13 International Conference, Bamberg, Germany,
Vol. 9298).
Research output: Scientific - peer-review › Conference contribution

Towards liquid web applications. / Mikkonen, Tommi; Systä, Kari; Pautasso, Cesare.
Engineering the Web in the Big Data Era: 15th International Conference, ICWE 2015, Rotterdam, The Netherlands, June
Research output: Scientific - peer-review › Conference contribution

Towards Post-Agile Development Practices Through Productized Development Infrastructure. / Leppänen, Marko; Kilamo,
Terhi; Mikkonen, Tommi.
Research output: Scientific - peer-review › Conference contribution

User experience and usability in complex systems 2010-2015 : Final report 1/2015. / Nuutinen, Maaria; Koskinen, Hanna;
Seppänen, Marko; Kantola, Kalle; Lindborg, Iiro; Smedlund, Anssi; Kaasinen, Eija; Paunonen, Hannu; Ruotsalainen,
Jouni; Oksanen, Jaakko; Jokinen, Jussi P.P.; Mannonen, Petri; Saariluoma, Pertti; Aikala, Maju; Savioja, Paula; Roto,
Virpi; Lu, Yichen; Vassamo, Anna-Leena; Kuusi, Osmo; Uusitalo, Kero.
Research output: Professional › Commissioned report

User experience goals as a guiding light in design and development – Early findings. / Vääätäjä, Heli; Savioja, Paula; Roto,
Virpi; Olsson, Thomas; Varsaluoma, Jari.
Research output: Scientific - peer-review › Conference contribution

User Experience of Digital News : Two Semi-long Term Field Studies. / Pesonen, Emilia; Jumisko-Pyykkö, Satu; Vääätäjä,
Heli.
Research output: Scientific - peer-review › Conference contribution

User Experience of Mobile Proximity-Based Applications for Playful Social Interaction. / Paasovaara, Susanna.
414.
Research output: Scientific - peer-review › Conference contribution

Using video games to combine learning and assessment in mathematics education. / Kiili, Kristian ; Devlin, Keith; Perottula,
Arttu ; Tuomi, Sanna ; Lindstedt, Antero .
Research output: Scientific - peer-review › Article

UX sensors - Understanding the UX of complex systems through usage analysis. / Heimonen, Tomi; Tiitinen, Katarina;
Turunen, Markku; Keskinen, Tuuli; Vääätäjä, Heli; Varsaluoma, Jari; Jokinen, Jussi; Nieminen, Harri.
113-115 (FIMECC Publication series; Vol. 8).
Research output: Professional › Chapter
UX work in startups: Current practices and future needs. / Hokkanen, Laura; Väänänen-Vainio-Mattila, Kaisa.
Research output: Scientific - peer-review » Conference contribution

Vibrotactile Stimulation as an Instructor for Mimicry-Based Physical Exercise. / Lylykangas, Jani; Heikkinen, Jani; Surakka, Veikko; Raisamo, Roope; Myllymäki, Kalle; Latinen, Arvo.
Research output: Scientific - peer-review » Article

W2E - Wellness Warehouse Engine for Semantic Interoperability of Consumer Health Data. / Honko, Harri; Andalibi, Vafa; Aaltonen, Timo; Parak, Jakub; Saaranen, Mika; Viik, Jari; Korhonen, Ilkka.
Research output: Scientific - peer-review » Article

Ways to Cross the Rubicon: Pivoting in Software Startups. / Terho, Henri; Suonsyrjä, Sampo; Karisalo, Aleksi; Mikkonen, Tommi.
Research output: Scientific - peer-review » Conference contribution

Ways to measure spatial presence: Review and future directions. / Laarni, Jari; Ravaja, Niklas; Saari, Timo; Böcking, Saskia; Hartmann, Tilo; Schramm, Holger.
Research output: Scientific - peer-review » Chapter

WHIRLBOB, the Whirlpool Based Variant of STRIBOB. / Saarinen, Markku-Juhani O.; Brumley, Billy Bob.
Research output: Scientific - peer-review » Conference contribution

Maximizing Product Value: Continuous Maintenance. / Mikkonen, Tommi; Systä, Kari.
Research output: Scientific - peer-review » Conference contribution

The fuzzy front end of experience design. / Kaasinen, Eija; Vääntäjä, Heli; Karvonen, Hannu; Lu, Yichen.
Research output: Scientific - peer-review » Conference contribution

Capacitive Facial Activity Measurement. / Rantanen, Ville.
Tampere: Tampere University of Technology, 2014. 50 p. (Tampere University of Technology. Publication; No. 1235).
Research output: Collection of articles » Doctoral Thesis

Lightweight Evaluation of Software Architecture Decisions. / Eloranta, Veli-Pekka; van Heesch, Uwe; Avgeriou, Paris; Harrison, Neil; Koskimies, Kai.
Research output: Scientific - peer-review » Chapter

Integrating mobile learning, digital storytelling and social media in vocational learning. / Eriksson, Miikka; Tuomi, Pauliina; Vuojärvi, Hanna.
Research output: Scientific - peer-review » Chapter
Patterns for controlling chaos in a startup. / Eloranta, Veli-Pekka.
Research output: Scientific - peer-review › Conference contribution

Two patterns for minimizing human resources in a startup. / Leppänen, Marko.
VikingPLoP 2014 Proceedings of the 8th Nordic Conference on Pattern Languages of Programs (VikingPLoP) . ACM,
2014. 4.
Research output: Scientific - peer-review › Conference contribution

Prediction models and techniques for Open Source Software projects : A systematic literature review. / Syeed, M. M
Mahbubul; Hammouda, Imed; Systä, Tarja.
Research output: Scientific - peer-review › Article

Proceedings of The 2nd IEEE Working Conference on Software Visualization, VISSOFT 2014, Victoria, BC, Canada,
Research output: Scientific - peer-review › Conference contribution

Adaptive Activity and Environment Recognition for Mobile Phones. / Parviainen, Jussi; Bojja, Jayaprasad; Collin, Jussi;
Leppänen, Jussi; Eronen, Antti.
Research output: Scientific - peer-review › Article

A High Throughput LDPC Decoder using a Mid-range GPU. / Xie, Wen; Jiao, XianJun; Jääskeläinen, Pekka; Kultala, Heikki;
Chen, Canfeng; Berg, Heikki; Bie, Zhisong.
IEEE International Conference on Acoustics, Speech, and Signal Processing, ICASSP 2014, Florence, Italy, May 4-9,
Processing).
Research output: Scientific - peer-review › Conference contribution

Määttä, Lasse; Suhonen, Jukka; Hännikäinen, Marko.
Advancing Embedded Systems and Real-Time Communications with Emerging Technologies. ed. / Seppo Virtanen. IGI
Research output: Scientific - peer-review › Chapter

Are visualization tools used in programming education?: by whom, how, why, and why not? / Isohanni, Essi; Järvinen,
Hannu-Matti.
Proceedings of the 14th Koli Calling International Conference on Computing Education Research, Koli, Finland,
education research).
Research output: Scientific - peer-review › Conference contribution

Assessing Dog’s experience in ACI. / Vääätäjä, Heli.
Animal-Computer Interaction (ACI) Workshop, affiliated with NordiCHI 2014, The 8th Nordic Conference on Human-
(NordiCHI 2014, Nordic Conference on Human-Computer Interaction).
Research output: Scientific - peer-review › Conference contribution

At the Edge of the Cloud: Improving the Coordination of Proactive Social Devices. / Mäkitalo, Niko; Mikkonen, Tommi.
Varazdin, Croatia. Zagreb, Croatia : University of Zagreb, 2014. p. 266-273 (International conference on information
systems development).
Research output: Scientific - peer-review › Conference contribution


Research output: Scientific - peer-review › Conference contribution


Research output: Scientific - peer-review › Conference contribution


Research output: Scientific - peer-review › Conference contribution


Research output: Scientific - peer-review › Conference contribution


Research output: Scientific - peer-review › Chapter


Research output: Scientific - peer-review › Chapter


Research output: Scientific - peer-review › Conference contribution


Research output: Scientific - peer-review › Article


Research output: Scientific - peer-review › Book


Flow in SGs. / Kiili, Kristian; Perttula, Arttu. Game and Learning Alliance GALA, 2014. 46 p.

From architectural requirements towards an open architecture for web and mobile societal applications. / Vogel, Bahtijar; Kurti, Arianit; Mikkonen, Tommi; Milrad, Marcelo.
Research output: Scientific - peer-review › Conference contribution

From Mashup Applications to Open Data Ecosystems. / Aaltonen, Timo; Mikkonen, Tommi; Peltola, Heikki; Salminen, Arto.
Research output: Scientific - peer-review › Conference contribution

Gamification of System-on-Chip Design. / Hämäläinen, Timo D.; Salminen, Erno.
Research output: Scientific - peer-review › Conference contribution

Green Software: Greening What and How Much? / Sierszecki, Krzysztof; Mikkonen, Tommi; Steffens, Michaela; Fogdal, Thomas; Savolainen, Juha.
Research output: Scientific - peer-review › Article

Grover: Looking for Performance Improvement by Disabling Local Memory Usage in OpenCL Kernels. / Fang, Jianbin; Sips, Henk; Jääskeläinen, Pekka; Varbanescu, Ana Lucia.
Research output: Scientific - peer-review › Conference contribution

Handbook of the Secure Agile Software Development Life Cycle. / Ahola, Jouko; Frühwirth, Christian; Helenius, Marko; Kutvonen, Lea; Myllylahti, Juho; Nyberg, Timo; Ari, Pietikäinen; Pietikäinen, Pekka; Röning, Juha; Ruohomaa, Sini; Särs, Camillo; Siiskonen, Tuuli; Vähä-Sipiä, Antti; Ville, Ylimannela.
Research output: Professional › Book

Heuristics for Greedy Transport Triggered Architecture Interconnect Exploration. / Viitanen, Timo; Kultala, Heikki; Jääskeläinen, Pekka; Takala, Jarno.
Research output: Scientific - peer-review › Conference contribution

Hierarchical Architecture for Multi-Technology Wireless Sensor Networks for Critical Infrastructure Protection. / Karvonen, Heikki; Suohonentukhas, Jukka; Petäjäjärvi, Juha; Hämäläinen, Matti; Hännikäinen, Marko; Pouttu, Ari.
Research output: Scientific - peer-review › Article

Research output: Scientific - peer-review › Conference contribution
How novices tackle their first lines of code in an IDE: analysis of programming session traces. / Vihavainen, Arto; Helminen, Juha; Ihantola, Petri.
Research output: Scientific - peer-review › Conference contribution

Identifying the User Experience Factors of a Multi-Component Sports Product. / Sahar, Farrukh; Varsaluoma, Jari Tapio; Kujala, Sari; Väänänen, Kaisa Anneli.
Research output: Scientific - peer-review › Conference contribution

IEEE 802.11AC MIMO Transmitter Baseband Processing on Customized VLIW Processor. / Aghababaeetafreshi, Mona; Lehtonen, Lasse; Soleimani, Malhehe; Valkama, Mikko; Takala, Jarmo.
Research output: Scientific - peer-review › Conference contribution

Increasing Adoption of Smart Learning Content for Computer Science Education. / Brusilovsky, Peter; Edwards, Stephen; Kumar, Amruth; Malmi, Lauri; Benotti, Luciana; Buck, Duane; Ihantola, Petri; Prince, Rikki; Sirkkä, Teemu; Sosnovsky, Sergey; Urquiza, Jaime; Vihavainen, Arto; Wollowski, Michael.
Research output: Scientific - peer-review › Conference contribution

Information Modelling and Knowledge Bases XXV. / Tokuda, Takehiro (Editor); Kiyoki, Yasushi (Editor); Jaakkola, Hannu (Editor); Yoshida, Naofumi (Editor).
Research output: Scientific - peer-review › Anthology

Information Modelling and Knowledge Bases XXVI. / Thalheim, Bernhard (Editor); Jaakkola, Hannu (Editor); Kiyoki, Yasushi (Editor); Yoshida, Naofumi (Editor).
Research output: Scientific - peer-review › Anthology

Integrated model-in-the-loop simulations to model-driven development in industrial control. / Vepsäläinen, Timo; Kuikka, Seppo.
Research output: Scientific - peer-review › Article

Intercultural Collaboration in Virtual Environment. / Welzer, Tatjana; Jaakkola, Hannu; Höbl, Marko; Druzovec, Marjan; Ward, Anthony E.
Research output: Scientific - peer-review › Chapter

International Symposium on System-on-Chip Proceedings, SoC 2014, October 28-29, 2014, Tampere, Finland. / Nurmi, Jari (Editor); Ellervee, Peeter (Editor); Milojevic, Dragomir (Editor); Daniel, Ondrej (Editor); Paakki, Tommi (Editor).
IEEE, 2014.
Research output: Scientific - peer-review › Anthology

Knowledge transfer in collaborative teams: experiences from a two-week code camp. / Kilamo, Terhi; Nieminen, Antti; Lautamäki, Janne; Aho, Timo; Koskinen, Johannes; Palviainen, Jarmo; Mikkonen, Tommi.
Learning by Creating Educational Exergames: Creative Pedagogy That Gets Students Moving. / Kiili, Kristian; Tuomi, Paulina; Koskela, Mikko; Earp, Jeffrey.
Research output: Scientific - peer-review › Chapter

Liquid Software Manifesto: The Era of Multiple Device Ownership and Its Implications for Software Architecture. / Taivalsaari, Antero; Mikkonen, Tommi; Systä, Kari.
Research output: Scientific - peer-review › Conference contribution

Lively3D: Building a 3D Desktop Environment as a Single Page Application. / Voutilainen, Jari-Pekka; Mattila, Anna-Liisa; Mikkonen, Tommi.
Research output: Scientific - peer-review › Article

Location Sharing Patterns of Parents and Their Children. / Helenius, Marko; Kannisto, Joona; Kiljander, Harri; Nore, Ville.
Research output: Professional › Article

Measuring Energy Consumption for RESTful Interactions in 3GPP IoT Nodes. / Savolainen, Teemu; Javed, Nadir; Silverajan, Bilhanan.
Research output: Scientific - peer-review › Conference contribution

Measuring Retrospective User Experience of Non-Powered Hand Tools: Exploratory Remote Study with UX Curve. / Varsaluoma, Jari; Sahar, Farrukh.
Research output: Scientific - peer-review › Conference contribution

Mobile panoramic video applications for learning. / Multisilta, Jari.
Research output: Scientific - peer-review › Article

Research output: Scientific - peer-review › Chapter

Multicultural Adaptive Systems. / Jaakkola, Hannu ; Thalheim, Bernhard.
Research output: Scientific - peer-review › Chapter

On Designing UX for Mobile Enterprise Apps. / Kuusinen, Kati; Mikkonen, Tommi.
Research output: Scientific - peer-review › Conference contribution
Open Data - Opportunities and Challenges. / Jaakkola, Hannu; Mäkinen, Timo; Eteläaho, Anna.
Research output: Scientific - peer-review › Conference contribution

Opiskelun etenemisen kartoitushanke tietotekniikan koulutusohjelmassa. / Kurlin, Ari; Pesonen, Emilia; Isohanni, Essi.
Research output: Professional › Commissioned report

Opportunities and Challenges of Mobile Applications as "Tickets-to-Talk": A Scenario-Based User Study. / Jarusriboonchai, Pradthana; Olsson, Thomas; Ojala, Jarno; Väänänen-Vainio-Mattila, Kaisa.
Research output: Scientific - peer-review › Conference contribution

Parallel programming of a symmetric Transport-Triggered Architecture with applications in flexible LDPC encoding. / Rister, Blaine; Jääskeläinen, Pekka; Silvén, Olli; Hannuksela, Jari; Cavallaro, Joseph R.
Research output: Scientific - peer-review › Conference contribution

Patterns for Sharing Safety System Operation Responsibilities between Humans and Machines. / Rauhamäki, Jari; Kuikka, Seppo.
Research output: Scientific - peer-review › Conference contribution

Peleillä liikettä, luovuutta ja yhteisöllisyyttä koulupäivään. / Kiili, Kristian; Tuomi, Pauliina; Perttula, Arttu; Kiili, Carita.
Research output: Scientific › Chapter

Programmable In-loop Deblock Filter Processor for Video Decoders. / Janhunen, Janne; Jääskeläinen, Pekka; Hannuksela, Jari; Rintaluoma, Tero; Kuusela, Aki.
Research output: Scientific - peer-review › Conference contribution

Quality Management of User-Generated Content in Participatory Journalism. / Jumisko-Pyykkö, Satu; Väätäjä, Heli; Jaakola, Markus.
Research output: Scientific - peer-review › Conference contribution

Research Plan: Visualizations for Software Analytics. / Mattila, Anna-Liisa; Mikkonen, Tommi.
Research output: Scientific - peer-review › Conference contribution
Resource Description for End-User Driven Service Compositions. / Hylli, Otto; Lahtinen, Samuel; Systä, Kari; Ruokonen, Anna.
Research output: Scientific - peer-review › Conference contribution

Safety Patterns in Model-Driven Development. / Vepsäläinen, Timo; Kuikka, Seppo.
Research output: Scientific - peer-review › Conference contribution

Service Composition for End-Users. / Hylli, Otto; Lahtinen, Samuel; Systä, Kari; Ruokonen, Anna.
Research output: Scientific - peer-review › Article

Social Index: A Content Discovery Application for Ad Hoc Communicating Smart Phones. / Kulmala, Janne; Vataja, Mikko; Rautainen, Sakari; Laukkanen, Teemu; Hännikäinen, Marko.
Research output: Scientific - peer-review › Conference contribution

Socio-Technical Congruence in the Ruby Ecosystem. / Syeed, M. M. Mahbubul; Hansen, Klaus Marius; Hammouda, Imed; Manikas, Konstantinos.
Research output: Scientific - peer-review › Conference contribution

Socio-Technical Dependencies in Forked OSS Projects: Revealing Evidence from BSD Family. / Syeed, M. M. Mahbubul; Hammouda, Imed.
Research output: Scientific - peer-review › Article

Software Startup Patterns - An Empirical Study. / Dande, Anuradha; Eloranta, Veli-Pekka; Hadayutullah, H.; Kovalainen, Antti-Jussi; Lehtonen, Timo; Leppänen, Marko; Salminen, Taru; Syeed, Mahbubul; Vuori, Matti; Rubattel, Claude; Weck, Wolfgang; Koskimies, Kai.
Research output: Professional › Commissioned report

Strategic Research Agenda for Cyber Trust. / Ahokangas, Markus; Arkkio, Vesa; Aura, Tuomas; Erkinheimo, Pia; Evesti, Antti; Frantti, Tapio; Hautamäki, Jari; Helenius, Marko; Hämäläinen, Matti; Kemppainen, Juha; Kirichencko, Alexey; Korkiakoski, Markku; Kuosmanen, Pauli; Laaksonen, Mika; Lehto, Martti; Manner, Jukka; Remes, Juha; Röning, Juha; Sahlin, Bengt.
DIGILE, 2014. 45 p. (DIGILE Board of Directors).
Research output: Professional › Commissioned report

Research output: Scientific - peer-review › Conference contribution

Studying the User Experience of a Tablet Based Math Game. / Kiili, Kristian; Ketamo, Harri; Koivisto, Antti; Finn, Enda.
Research output: Scientific - peer-review › Article

Research output: Scientific - peer-review » Conference contribution


Research output: Scientific - peer-review » Article


Research output: Scientific - peer-review » Conference contribution


Research output: Scientific - peer-review » Conference contribution


Research output: Scientific - peer-review » Conference contribution


Research output: Scientific - peer-review » Conference contribution


Research output: Scientific - peer-review » Conference contribution


Research output: Scientific - peer-review » Conference contribution

User Experience of Proactive Audio-Based Social Devices: a Wizard-of-Oz Study. / Jarusriboonchai, Pradthana; Olsson, Thomas; Väänänen-Vainio-Mattila, Kaisa.
Using Adaptive Avatars for Visualizing Recent Music Listening History and Supporting Music Discovery. / Lehtiniemi, Arto; Ojala, Jarno.
Research output: Scientific - peer-review » Conference contribution

Using Constraint Satisfaction and Optimization for Pattern-Based Software Design. / Vathsavayi, Sri Harsha; Sievi-Korte, Outi; Koskimies, Kai; Systä, Kari.
Research output: Scientific - peer-review » Conference contribution

Variable Length Instruction Compression on Transport Triggered Architectures. / Helkala, Janne; Viitanen, Timo; Kultala, Heikki; Jääskeläinen, Pekka; Takala, Jarmo; Zetterman, Tommi; Berg, Heikki.
Research output: Scientific - peer-review » Conference contribution

White Knights of the Smart City. / Kymäläinen, Tiina; Sahar, Farrukh; Palviainen, Jarmo.
Research output: Scientific - peer-review » Conference contribution

Research output: Scientific - peer-review » Conference contribution

WOKE: A novel workflow model editor. / Salminen, Erno; Honkonen, Mikko; Matilainen, Lauri; Hämäläinen, Timo D.
Research output: Scientific - peer-review » Conference contribution

A Core-Periphery-Legality Architectural Style for Open Source System Development. / Lokhman, Alexander; Mikkonen, Tommi; Hammouda, Imed; Kazman, Rick; Chen, Hong-Mei.
Research output: Scientific - peer-review » Conference contribution

Research output: Scientific - peer-review » Conference contribution

A field trial on mobile crowdsourcing of news content: Factors influencing participation. / Väätäjä, Heli; Sirkkunen, Esa; Ahvenainen, Mari.
Algorithm for Pedestrian Navigation Combining IMU Measurements and Gait Models. / Davidson, Pavel; Takala, Jarmo.
Research output: Scientific - peer-review › Conference contribution

A light-weight mixed method tool for remote UX evaluation: A case study of premium sports watch users. / Nurkka, Piia; Jumisko-Pyykö, Satu.
Research output: Scientific - peer-review › Conference contribution

All Linear-Time Congruences for Familiar Operators. / Valmari, Antti.
Research output: Scientific - peer-review › Article

A mixed methods approach to a longitudinal study of user experience in the metals and engineering industry. / Väänäjä, Heli; Oja, Tuomas.
Research output: Scientific - peer-review › Conference contribution

An Accountable Security Mechanism based on Security Service Level Agreement. / Takahashi, Takeshi; Kannisto, Joona; Heikkinen, Seppo; Silverajan, Bilhanan; Helenius, Marko; Matsuo, Shin'ichiro; Harju, Jarmo.
Research output: Scientific - peer-review › Conference contribution

An Action-Oriented Programming Model for Pervasive Computing in a Device Cloud. / Aaltonen, Timo; Myllärniemi, Varvama; Raatikainen, Mikko; Mäkitalo, Niko; Pääkkö, Jari.
Research output: Scientific - peer-review › Conference contribution

An Embedded Cloud Design for Internet-of-Things. / Laukkanen, Teemu; Suhonen, Jukka; Hännikäinen, Marko.
Research output: Scientific - peer-review › Article

Applying Lehman's laws to game evolution. / Nummenmaa, Timo; Kultima, Annakaisa; Alha, Kati; Mikkonen, Tommi.
Research output: Scientific - peer-review › Conference contribution

A secure OSGi environment for untrusted web applications. / Aho, Timo; Koskinen, Johannes; Nieminen, Antti.
Research output: Scientific - peer-review › Conference contribution

A User-Centric View of Intelligent Environments: User Expectations, User Experience and User Role in Building Intelligent Environments. / Kaasinen, Eija; Kymäläinen, Tiina; Niemelä, Marketta; Olsson, Thomas; Kanerva, Minna; Ikonen, Veikko.
Research output: Scientific - peer-review › Article
Bayesian analysis of GUHA hypotheses. / Piche, Robert; Järvenpää, Marko; Turunen, Esko; Simunek, Milan. 
Research output: Scientific - peer-review › Article

City Scene: Field Trial of a Mobile Street-Imagery-based Navigation Service. / Vaittinen, Tuomas; Salminen, Miiikka; Olsson, Thomas. 
Research output: Scientific - peer-review › Conference contribution

Cloud Browser: Enhancing the Web Browser with Cloud Sessions and Downloadable User Interface. / Taivalsaari, Antero; Mikkonen, Tommi; Systä, Kari. 
Research output: Scientific - peer-review › Conference contribution

Cloud computing and its impact on mobile software development: Two roads diverged. / Mikkonen, Tommi; Taivalsaari, Antero. 
Research output: Scientific - peer-review › Article

Code Oriented Approach to 3D Widgets. / Mattila, Anna-Liisa. 
Research output: Scientific - peer-review › Conference contribution

Cognitive styles and visual quality. / Jumisko-Pyykkö, Satu; Strohmeier, Dominik. 
Research output: Scientific - peer-review › Conference contribution

Complementing Web Service Architecture. / Mäkitalo, Niko; Peitola, Heikki; Turto, Tuomas; Mikkonen, Tommi; Savolainen, Juha. 
Research output: Scientific - peer-review › Chapter

Constructing Minimal Coverability Sets. / Piipponen, Artturi; Valmari, Antti. 
Research output: Scientific - peer-review › Conference contribution

Customized TTA Processor for Efficient Implementation of Variable Length FFT in SDR Systems. / Patyk, Tomasz; Guevorkian, David; Pitkänen, Teemu; Takala, Jarmo. 
Research output: Scientific - peer-review › Conference contribution

Demo Hour. DrawUX. / Varsaluoma, Jari; Kentta, Ville. 
Dependency Analysis and Visualization Tool for Kactus2 IP-XACT Design Framework. / Määttä, Joni-Matti; Honkonen, Mikko; Korhonen, Tommi; Salminen, Erno; Hämäläinen, Timo D.
Research output: Scientific - peer-review › Conference contribution

Designing a 3D Widget Library for WebGL Enabled Browsers. / Mattila, Anna-Liisa; Mikkonen, Tommi.
Research output: Scientific - peer-review › Conference contribution

Designing for Presence in Social Television Interaction. / Palviainen, Jarmo; Kuusinen, Kati; Väänänen-Vainio-Mattila, Kaisa.
Research output: Scientific - peer-review › Conference contribution

Developing Client-Side Mashups: Experiences, Guidelines and Reference Architecture. / Salminen, Arto; Mikkonen, Tommi; Nyrhinen, Feetu; Taivalsaari, Antero.
Research output: Scientific - peer-review › Article

Developing Cloud Software: Algorithms, Applications, and Tools. / Porres, Ivan (Editor); Mikkonen, Tommi (Editor); Ashraf, Adnan (Editor).
Turku, Finland : TURKU CENTRE FOR COMPUTER SCIENCE, 2013. (TUCS General Publication; No. 60).
Research output: Scientific - peer-review › Anthology

Developing Modern Industrial Control Applications: On Information Models, Methods and Processes for Distributed Engineering. / Hästbacka, David.
Tampere University of Technology, 2013. 135 p. (Tampere University of Technology. Publication; No. 1143).
Research output: Monograph › Doctoral Thesis

Energy Recovery and Logical Reversibility in Adiabatic CMOS Multiplier. / Hänninen, Ismo; Lu, Hao; Lent, Craig S.; Snider, Gregory L.
Research output: Scientific - peer-review › Conference contribution

Exploring Usage Scenarios on Social Devices: Balancing Between Surprise and User Control. / Palviainen, Jarmo; Suhonen, Katja; Väänänen-Vainio-Mattila, Kaisa; Aaltonen, Timo; Leppänen, Tapio.
Research output: Scientific - peer-review › Conference contribution

Extending IP-XACT to embedded system HW/SW integration. / Kamppi, Antti; Matilainen, Lauri; Määttä, Joni-Matti; Salminen, Erno; Hämäläinen, Timo D.
Research output: Scientific - peer-review › Conference contribution
External Behaviour of Systems of State Machines with Variables. / Valmari, Antti.
Research output: Scientific - peer-review » Conference contribution

Framework for Industrial Embedded System Product Development and Management. / Leppäkoski, Arttu; Salminen, Ermo ; Hämäläinen, Timo D.
Research output: Scientific - peer-review » Conference contribution

General-Purpose DSP Processors. / Takala, Jarmo.
Research output: Scientific - peer-review » Chapter

Good to Know about the Efficiency of State Space Methods. / Tiusanen, Mikko; Valmari, Antti.
Research output: Scientific - peer-review » Article

Guest Editors’ Introduction to Special Issue on Advances in DSP Systems Design. / Takala, Jarmo; Gross, W.J.; Sung, W.
Research output: Scientific - peer-review » Anthology

Handbook of Signal Processing Systems. / Bhattacharyya, Shuvra (Editor); Deprettere, Ed (Editor); Leupers, Rainer (Editor); Takala, Jarmo (Editor).
Research output: Scientific - peer-review » Anthology

HTML5 Agents - Mobile Agents for the Web. / Systä, Kari; Mikkonen, Tommi; Järvenpää, Laura.
Research output: Scientific - peer-review » Conference contribution

Implementing artificial intelligence: a generic approach with software support. / Heinimäki, Teemu J.; Vanhatupa, Juha-Matti.
Research output: Scientific - peer-review » Article

Indoor 3D Navigation and Positioning of Vehicles in Multi-Storey Parking Garages. / Bojjja, Jayaprasad; Kirkko-Jaakkola, Martti; Collin, Jussi; Takala, Jarmo.
Research output: Scientific - peer-review » Conference contribution

Inertial Sensors and Their Applications. / Collin, Jussi; Davidson, Pavel; Kirkko-Jaakkola, Martti; Leppäkoski, Helena.
Research output: Scientific - peer-review » Chapter
Inexpensive Correctly Rounded Floating-Point Division and Square Root With Input Scaling. / Viitanen, Timo; Jääskeläinen, Pekka; Takala, Jarmo. 
Research output: Scientific - peer-review › Conference contribution

Instruction Set Extensions for Matrix Decompositions on Software Defined Radio Architectures. / Senthilvelan, Murugappan; Sima, Mihai; Iancu, Daniel; Schulte, Michael; Glossner, John. 
Research output: Scientific - peer-review › Article

Interaction with Dynamic Large Bodies in Efficient, Real-Time Water Simulation. / Kellomäki, Timo. 
Research output: Scientific - peer-review › Article

Interleaving human and search-based software architecture design. / Vathsavayi, Sriharsha; Hadaytullah, H.; Koskimies, Kai. 
Research output: Scientific - peer-review › Article

IPV6 Addressing Strategies for IoT. / Savolainen, Teemu; Soininen, Jonne; Silverajan, Bilhanan. 
Research output: Scientific - peer-review › Article

Key Success Factors in Control System Software Architecture. / Eloranta, Veli-Pekka; Koskinen, Johannes; Leppänen, Marko. 
Research output: Scientific - peer-review › Conference contribution

Landmarks for the User Experience in the Cloud. / Vilminko, Sari (Editor); Väänänen-Vainio-Mattila, Kaisa (Editor). 
Research output: Scientific - peer-review › Anthology

Little Backpackers - Studying Children's Psychological Needs in an Interactive Exhibition Context. / Saarinen, Petri; Partala, Timo; Väänänen-Vainio-Mattila, Kaisa. 
Research output: Scientific - peer-review › Conference contribution

Long-Term Product Line Sustainability with Planned Staged Investments. / Savolainen, Juha; Niu, Nan; Mikkonen, Tommi; Fogdal, Thomas. 
Research output: Scientific - peer-review › Article

Low Complexity Algorithm for Inversion of Special Matrices in SDR Systems. / Guevorkian, David; Raunioja, Kim; Takala, Jarmo. 
Research output: Scientific - peer-review › Conference contribution

Low-Power Application-Specific FFT Processor for LTE Applications. / Patyk, Tomasz; Guevorkian, David; Pitkänen, Teemu; Jääskeläinen, Pekka; Takala, Jarmo. 
Research output: Scientific - peer-review › Chapter

Media experience as a predictor of future news reading. / Järvelä, Simo; Kivikangas, Matias; Saari, Timo; Ravaja, Niklas.
Research output: Scientific - peer-review › Article

Method to Convert Analog Filters to Digital Filters. / Grama, Lacrimioara; Lodin, Alexandru; Rusu, Cornelius; Takala, Jarmo.
Research output: Scientific - peer-review › Conference contribution

Mobile Devices as Infotainment User Interfaces in the Car: Contextual Study and Design Implications. / Heikkinen, Jani; Mäkinen, Emo; Lyltykangas, Jani; Pakkanen, Toni; Väänänen-Vainio-Mattila, Kaisa; Raisamo, Roop.
Research output: Scientific - peer-review › Conference contribution

Nobody other than me knows what I want: Customizing a sports watch. / Nurkka, Piia.
Research output: Scientific - peer-review › Conference contribution

On the Transition from the Web to the Cloud. / Tupamäki, Jukka; Mikkonen, Tommi.
Research output: Scientific - peer-review › Conference contribution

Open Source Legality Compliance of Software Architecture, A Licensing Profile Approach. / Lokhman, Alexander; Luoto, Antti; Hammouda, Imed; Mikkonen, Tommi.
Research output: Scientific - peer-review › Conference contribution

Personal content in online sports communities: motivations to capture and share personal exercise data. / Ojala, Jarno.
Research output: Scientific - peer-review › Article
Pipelined FFT for Wireless Communications Supporting 128-2048 / 1536-Point Transforms, / Cho, Inkeun; Patyk, Tomasz; Guevorkian, David; Takala, Jarno; Bhattacharyya, Shuvra.
Research output: Scientific - peer-review › Conference contribution

Planning Global Software Development Projects Using Genetic Algorithms, / Vathsavayi, Sri Harsha; Sievi-Korte, Outi; Koskimies, Kai; Systä, Kari.
Research output: Scientific - peer-review › Conference contribution

Profiling EEMBC MultiBench Programs In 64-Core Machine, / Chen, Chao; Joshi, Ajay; Salminen, Erno.
Research output: Scientific - peer-review › Article

Recommendations for using Simulated Annealing in task mapping, / Orsila, Heikki; Salminen, Erno; Hämäläinen, Timo.
Research output: Scientific - peer-review › Article

Reflections on Experience-Driven Design: a Case Study on Designing for Playful Experiences, / Olsson, Thomas; Väänänen-Vainio-Mattila, Kaisa; Saari, Timo; Lucero, An.
Research output: Scientific - peer-review › Conference contribution

Roles, Scenarios and Challenges of Social Devices, / Jarusriboonchai, Pradthana; Olsson, Thomas; Väänänen-Vainio-Mattila, Kaisa.
Research output: Scientific - peer-review › Conference contribution

Scrum Anti-patterns - An Empirical Study, / Eloranta, Veli-Pekka; Koskimies, Kai; Mikkonen, Tommi; Vuorinen, Jyri.
Research output: Scientific - peer-review › Conference contribution

Security, Usability and Energy-Efficiency Requirements for Different Use-cases of the Interactive 360 Panorama Video Player, / Berki, Eleni; Chaudhary, Sunil; Helenius, Marko; Kela, Juha; Turunen, Markku.
Research output: Scientific - peer-review › Conference contribution

Sentence Completion for Understanding Users and Evaluating User Experience, / Kujala, Sari; Walsh, Tanja; Nurkka, Piia; Crisan, Marian.
In: Interacting with Computers, 2013.
Research output: Scientific - peer-review › Article

Service Composition for End-Users, / Hylli, Otto; Lahtinen, Samuel; Ruokonen, Anna; Systä, Kari.
Research output: Scientific - peer-review › Conference contribution


The role of community in exercise: cross-cultural study of online exercise diary users. / Malinen, Sanna; Nurkka, Piia. Proceedings of the 6th International Conference on Communities and Technologies (C&T ’13), 1-2 July 2013, Munich, Germany. ACM, 2013. p. 55-63 (International Conference on Communities and Technologies).


Turbo Decoding on Tailored OpenCL Processor. / Kultala, Heikki; Esko, Otto; Jääskeläinen, Pekka; Guzma, Vladimir; Takala, Jarmo; Xianjun, Jiao; Zetterman, Tommi; Berg, Heikki.
Research output: Scientific - peer-review › Conference contribution

Use of compiler optimization of software bypassing as a method to improve energy efficiency of exposed data path architectures. / Guzma, Vladimir; Pitkänen, Teemu; Takala, Jarmo.
Research output: Scientific - peer-review › Article

User Experience and Usage Scenarios of Audio-Tactile Interaction with Virtual Objects in a Physical Environment. / Väänänen-Vainio-Mattila, Kaisa; Suhonen, Katja; Laaksonen, Jari; Kildal, Johan; Ahmaniemi, Teemu; Tahiroglu, Tahiroglu.
Research output: Scientific - peer-review › Conference contribution

User Experiences of Mobile Audio Conferencing with Spatial Audio, Haptics and Gestures. / Rantala, Jussi; Suhonen, Katja; Müller, Sebastian; Väänänen-Vainio-Mattila, Kaisa; Lantz, Vuokko; Raisamo, Roope.
Research output: Scientific - peer-review › Conference contribution

Using aspects for testing of embedded software: experiences from two industrial case studies. / Metsä, Jani; Maoz, Shahar; Katara, Mika; Mikkonen, Tommi.
Research output: Scientific - peer-review › Article

Using Building Plans and Self-Contained Sensors with GNSS Initialization for Indoor Navigation. / Kirkko-Jaakkola, Martti; Collin, Jussi; Takala, Jarmo.
Research output: Scientific - peer-review › Conference contribution

Visualizations as a Basis for Agile Software Process Improvement. / Lehtonen, Timo; Eloranta, Veli-Pekka; Leppänen, Marko; Isohanni, Essi.
Research output: Scientific - peer-review › Conference contribution

Without a Clue What Design It Leads to: Exploring and Understanding a City and Life within It by Walking. / Väätäjä, Heli.
Research output: Scientific - peer-review › Conference contribution

Briefing news reporting with mobile assignments - Perceptions, needs and challenges. / Väätäjä, Heli; Egglestone, Paul.
Research output: Scientific - peer-review › Conference contribution

Comprehending co-evoluiton of OSS projects: Analytical methods and tool support. / Syeed, Mahbubul M.M.