Patou, François; Dimaki, Maria; Maier, Anja; Svendsen, Winnie Edith; Madsen, Jan / Model-Based Systems Engineering for Life-Sciences Instrumentation Development.

Schoeberl, Martin / One-way shared memory.

Alatraktchi, Fatima AlZahra’a; Noori, Jafar Safaa; Tanev, Georgi Plamenov; Mortensen, John; Dimaki, Maria; Johansen, Helle Krogh; Madsen, Jan; Molin, Søren; Svendsen, Winnie Edith / Paper-based sensors for rapid detection of virulence factor produced by Pseudomonas aeruginosa.

Pezzarossa, Luca / Reconfiguration of Computation and Communication Resources in Multi-Core Real-Time Embedded Systems.


Zarrin, Bahram; Baumeister, Hubert; Sarjoughian, Hessam S. / Towards Domain-specific Flow-based Languages.

Schneider, Alexander; Pop, Paul; Madsen, Jan / Pin-count reduction for continuous flow microfluidic biochips.
De Donno, Michele; Giaretta, Alberto; Dragoni, Nicola; Spognardi, Angelo / A taxonomy of distributed denial of service attacks. Proceedings of 2017 International Conference on Information Society (i-Society). IEEE, 2017. p. 100-7. Publication: Research - peer-review › Article in proceedings – Annual report year: 2018


Schoeberl, Martin; Cilku, Bekim; Prokesch, Daniel; Puschner, Peter / Best practice for caching of single-path code. In: Open Access Series in Informatics, Vol. 57, 2017. Publication: Research - peer-review › Journal article – Annual report year: 2017


Pezzarossa, Luca; Kristensen, Andreas Toftegaard; Schoeberl, Martin; Sparsø, Jens / Can Real-Time Systems Benefit from Dynamic Partial Reconfiguration? Proceedings of the IEEE NorCAS 2017. IEEE, 2017. Publication: Research - peer-review › Article in proceedings – Annual report year: 2017


Bardram, Jakob Eyvind; Houben, Steven / Collaborative Affordances of Medical Records. In: Computer Supported Cooperative Work, 2017. Publication: Research - peer-review › Journal article – Annual report year: 2017

Pedersen, Nicolai; Madsen, Jan (Main supervisor) / Co-Simulation of Cyber-Physical System with Distributed Embedded Control. DTU Compute, 2017. 136 p. Publication: Research › Ph.D. thesis – Annual report year: 2017


Pedersen, Nicolai; Lausdahl, Kenneth; Sanchez, Enrique Vidal; Larsen, Peter Gorm; Madsen, Jan / Distributed co-simulation of embedded control software with exhaust gas recirculation water handling system using INTO-CPS. SIMULTECH 2017 - Proceedings of the 7th International Conference on Simulation and Modeling Methodologies, Technologies and Applications. SCITEPRESS Digital Library, 2017. p. 73-82. Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Huang, Wei Lun; Gupta, Ankur; Roy, Sudip; Ho, Tsung-Yi; Pop, Paul / Fast architecture-level synthesis of fault-tolerant flow-based microfluidic biochips.

Gavrilut, Voica Maria; Zarrin, Bahram; Pop, Paul; Samii, Soheil / Fault-Tolerant Topology and Routing Synthesis for IEEE Time-Sensitive Networking.

Nielsen, Niels Axel; Bardram, Jakob Eyvind; Madsen, Jan; Jørgensen, John Bagterp; Riis, Mark Bernhard; Andersen, Henning Boje; Sørensen, Helge Bjarup Dissing; Svendsen, Winnie Edith; Andersen, Peter E.; Pryds, Nini; Lauritsen, Sune Nordenloft; Skov, Anne Ladegaard; Buch, Martin Jensen; Andersen, Morten; Billund, Charlotte Holm; Brückner, Lars; Kruse, Stine; Molzen, Jan Eiersted; Ogaard, Mads H / Helbredstjek af dansk sundhedsteknologi: Sektorudviklingsrapport.
Technical University of Denmark (DTU), 2017. 72 p.

Kristensen, Andreas Toftegaard; Pezzarossa, Luca; Sparsø, Jens / High-level synthesis for reduction of WCET in real-time systems.

Jensen, Nicklas Bo; Probst, Christian W. (Supervisor); Karlsson, Sven (Supervisor) / High Performance with Prescriptive Optimization and Debugging.
Kgs. Lyngby: Technical University of Denmark (DTU), 2017. 204 p. (DTU Compute PHD-2016; No. 437).

Ruecha, Nipapan; Lee, Jumi; Chae, Heedo; Cheong, Haena; Soum, Veasna; Preechakasedkit, Pattarachaya; Challapakul, Orawon; Tanev, Georgi Plamenov; Madsen, Jan; Rodthongkum, Nadnudda; Kwon, Oh-Sun; Shin, Kwanwoo / Paper-Based Digital Microfluidic Chip for Multiple Electrochemical Assay Operated by a Wireless Portable Control System.
Cresci, Stefano; Di Pietro, Roberto; Petrocchi, Marinella; Spognardi, Angelo; Tesconi, Maurizio / Social Fingerprinting: detection of spambot groups through DNA-inspired behavioral modeling.
Publication: Research - peer-review › Journal article – Annual report year: 2017

Potluri, Seetal; Schneider, Alexander Rüdiger; Hørslev-Petersen, Martin; Pop, Paul; Madsen, Jan / Synthesis of on-chip control circuits for mVLSI biochips.
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Patou, François; Dimaki, Maria; Kjærgaard, Claus; Madsen, Jan; Svendsen, Winnie Edith / System-Level Sensitivity Analysis of SiNW-bioFET-Based Biosensing Using Lockin Amplification.
Publication: Research - peer-review › Journal article – Annual report year: 2017

Baig, Hasan; Madsen, Jan / Taming Living Logic using Formal Methods.
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Munck, Allan; Madsen, Jan (Main supervisor); Lindqvist, Lars (Supervisor); Schmidt, Flemming (Supervisor); Pop, Paul (Supervisor) / Test-Driven, Model-Based Systems Engineering.
Publication: Research › Ph.D. thesis – Annual report year: 2017

Munck, Allan; Madsen, Jan / Test-driven modeling and development of cloud-enabled cyber-physical smart systems.
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Dragoni, Nicola; Giaretta, Alberto; Mazzara, Manuel / The Internet of Hackable Things.
Publication: Research - peer-review › Journal article – Annual report year: 2017

Zhao, Luxi; Pop, Paul; Li, Qiao; Chen, Junyan; Xiong, Huagang / Timing analysis of rate-constrained traffic in TTEthernet using network calculus.
Publication: Research - peer-review › Journal article – Annual report year: 2017

Schoeberl, Martin; Sparso, Jens / Timing organization of a real-time multicore processor.
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Avasalcai, Cosmin Florin; Budhrani, Dhanesh; Pop, Paul / Towards industry strength mapping of AUTOSAR automotive functionality on multicore architectures : work in progress.
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017
Publication: Research › Article in proceedings – Annual report year: 2018

Publication: Research - peer-review › Conference abstract in proceedings – Annual report year: 2017

Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Publication: Research › Ph.D. thesis – Annual report year: 2016

Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Publication: Research - peer-review › Article in proceedings – Annual report year: 2016
Kasapaki, Evangelia; Schoeberl, Martin; Sørensen, Rasmus Bo; Müller, Christoph; Goossens, Kees; Sparsø, Jens / Argo: A Real-Time Network-on-Chip Architecture With an Efficient GALS Implementation. In: IEEE Transactions on Very Large Scale Integration (VLSI) Systems, Vol. 24, No. 2, 2016, p. 479-492.
Publication: Research - peer-review › Journal article – Annual report year: 2015

Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Publication: Research - peer-review › Journal article – Annual report year: 2016

Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Rocha, André; Silva, Cláudio; Sørensen, Rasmus Bo; Sparsø, Jens; Schoeberl, Martin / Avionics Applications on a Time-Predictable Chip-Multiprocessor. Proceedings of the 24th Euromicro International Conference on Parallel, Distributed, and Network-Based Processing (PDP 2016). IEEE, 2016. p. 777-785.
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Faurholt-Jepsen, Maria; Vinberg, Maj; Frost, Mads; Debel, Sune; Christensen, Ellen Margrethe ; Bardram, Jakob Eyvind; Kessing, Lars Vedel / Behavioral activities collected through smartphones and the association with illness activity in bipolar disorder. In: International Journal of Methods in Psychiatric Research, Vol. 25, No. 4, 2016, p. 309–323.
Publication: Research - peer-review › Journal article – Annual report year: 2016

Publication: Research - peer-review › Journal article – Annual report year: 2016

Publication: Research › Report – Annual report year: 2016

Publication: Research - peer-review › Journal article – Annual report year: 2016
Evolvable Smartphone-Based Platforms for Point-Of-Care In-Vitro Diagnostics Applications.

Experimental Measures of News Personalization in Google News.

FMI for Co-Simulation of Embedded Control Software.

FPGA Acceleration by Dynamically-Loaded Hardware Libraries.

Game-based verification and synthesis.

Hardware locks for a real-time Java chip multiprocessor.

Implementation of Hardware Accelerators on Zynq.

Improved 64-bit Radix-16 Booth Multiplier Based on Partial Product Array Height Reduction.

Lessons learned from the EU project T-CREST.

Logic and Timing Analysis of Genetic Logic Circuits using D-VASim.

Microfluidic Very Large Scale Integration (VLSI) : Modeling, Simulation, Testing, Compilation and Physical Synthesis.
Goyal, Rohit; Dragoni, Nicola; Spognardi, Angelo / Mind the tracker you wear: a security analysis of wearable health trackers.
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Patou, François; Madsen, Jan; Dimaki, Maria; Svendsen, Winnie Edith / Model-Based Evaluation Of System Scalability: Bandwidth Analysis For Smartphone-Based Biosensing Applications.
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Nannarelli, Alberto / Performance/Power Space Exploration for Binary64 Division Units.
Publication: Research - peer-review › Journal article – Annual report year: 2016

Dyreson, Curtis (Editor); Hansen, Michael Reichhardt (Editor); Hunsberger, Luke (Editor) / Proceedings of the 23rd International Symposium on Temporal Representation and Reasoning (TIME 2016).
Publication: Research › Book – Annual report year: 2016

Laursen, Sune Mølgaard; Pop, Paul; Steiner, Wilfried / Routing Optimization of AVB Streams in TSN Networks.
Publication: Research - peer-review › Conference article – Annual report year: 2016

Schoeberl, Martin; Dalsgaard, Andreas Engelbredt; Hansen, René Rydhof; Korsholm, Stephan E.; Ravn, Anders P.; Rios Rivas, Juan Ricardo; Strom, Torur Biskopste; Sendergaard, Hans; Wellings, Andy; Zhao, Shuai / Safety-critical Java for embedded systems.
Publication: Research - peer-review › Journal article – Annual report year: 2016

Wearing, Thomas; Dragoni, Nicola / Security And Privacy Issues in Health Monitoring Systems: eCare@Home Case Study.
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Patou, François; Dimaki, Maria; Svendsen, Winnie Edith; Kjaergaard, Claus; Madsen, Jan / Smartphone-based biosensing platform evolution: implementation of electrochemical analysis capabilities.
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Sørensen, Rasmus Bo; Schoeberl, Martin; Sparsø, Jens / State-based Communication on Time-predictable Multicore Processors.
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016
Kluge, Florian; Schoeberl, Martin; Ungerer, Theo / Support for the Logical Execution Time Model on a Time-predictable Multicore Processor.
Publication: Research - peer-review › Conference article – Annual report year: 2016

Alistar, Mirela; Pop, Paul; Madsen, Jan / Synthesis of Application-Specific Fault-Tolerant Digital Microfluidic Biochip Architectures.
Publication: Research - peer-review › Journal article – Annual report year: 2016

Kasting, Patrick Frederik Soelmark; Hansen, Michael Reichhardt; Vester, Steen / Synthesis of railway-signaling plans using reachability games.
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Falk, Heiko; Altmeyer, Sebastian; Hellinckx, Peter; Lisper, Bjørn; Puffitsch, Wolfgang; Rochange, Christine; Schoeberl, Martin; Sørensen, Rasmus Bo; Wägemann, Peter; Wegener, Simon / TACLeBench: A benchmark collection to support worst-case execution time research.
Publication: Research - peer-review › Journal article – Annual report year: 2017

Bardram, Jakob Eyvind; Frost, Mads / The Personal Health Technology Design Space.
Publication: Research - peer-review › Journal article – Annual report year: 2016

Pop, Paul; Scholle, Detlef; Hansson, Hans; Widforss, Gunnar; Rosqvist, Malin / The SafeCOP ECSEL Project: Safe Cooperating Cyber-Physical Systems Using Wireless Communication.
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Serensen, Rasmus Bo; Sparse, Jens (Supervisor); Schoeberl, Martin (Supervisor) / Time-Predictable Communication on a Time-Division Multiplexing Network-on-Chip Multicore.
Kgs. Lyngby : Technical University of Denmark (DTU), 2016. 143 p. (DTU Compute PHD-2016; No. 423).
Publication: Research › Ph.D. thesis – Annual report year: 2016

Abbaspourseyedi, Sahar; Schoeberl, Martin (Supervisor); Sparse, Jens (Supervisor) / Time-predictable Stack Caching.
Publication: Research › Ph.D. thesis – Annual report year: 2016

Puffitsch, Wolfgang; Schoeberl, Martin / Time-Predictable Virtual Memory.
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Baig, Hasan; Madsen, Jan / Timing Analysis of Genetic Logic Circuits using D-VASim.
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2016

Podobas, Artur; Karlsson, Sven / Towards Unifying OpenMP Under the Task-Parallel Paradigm Implementation and Performance of the taskloop Construct.
Gavrilut, Voica Maria; Pop, Paul / Traffic class assignment for mixed-criticality frames in TTEthernet.

Faurholt-Jepsen, M.; Busk, Jonas; Frost, M.; Vinberg, M.; Christensen, E. M.; Winther, Ole; Bardram, Jakob Eyvind; Kessing, L. V. / Voice analysis as an objective state marker in bipolar disorder.

Faurholt-Jepsen, M.; Busk, J.; Frost, M.; Vinberg, M.; Christensen, E. M.; Winther, Ole; Bardram, Jakob Eyvind; Kessing, L. V. / Voice analysis as an objective state marker in bipolar disorder.

Goyal, Rohit; Dragoni, Nicola / Why Hackers Love eHealth Applications.


Zhang, Yue; Dragoni, Nicola; Wang, Jiangtao / A Framework and Classification for Fault Detection Approaches in Wireless Sensor Networks with an Energy Efficiency Perspective.

Dung, Phan Anh; Hansen, Michael Reichhardt / An approach to multicore parallelism using functional programming: A case study based on Presburger Arithmetic.

Kasapaki, Evangelia; Sparse, Jens (Supervisor); Schoeberl, Martin (Supervisor) / An Asynchronous Time-Division-Multiplexed Network-on-Chip for Real-Time Systems.

Micconi, Laura; Madsen, Jan (Supervisor); Pop, Paul (Supervisor) / A Probabilistic Approach for the System-Level Design of Multi-ASIP Platforms.

Jensen, Nicklas Bo; Quauffot Nielsen, Niklas ; Lee, Gregory L.; Karlsson, Sven ; Legendre, Matthew ; Schulz, Martin; Ahn, Dong H. / A Scalable Prescriptive Parallel Debugging Model.
Nyborg, Mads; Probst, Christian W.; Stassen, Flemming / Developing merged CDIO based curricula for diploma (B.Eng.) IT study programs at DTU.
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Baig, Hasan; Madsen, Jan / D-VASim: Dynamic Virtual Analyzer and Simulator for Genetic Circuits.
Publication: Research - peer-review › Conference abstract in proceedings – Annual report year: 2015

Abbaspourseyedi, Sahar; Brandner, Florian; Naji, Amine ; Jan, Mathieu / Efficient Context Switching for the Stack Cache: Implementation and Analysis.
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Jensen, Nicklas Bo; Schleuniger, Pascal; Hindborg, Andreas Erik; Walter, Maxwell; Karlsson, Sven / Experiences with Compiler Support for Processors with Exposed Pipelines.
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Cresci, Stefano; Di Pietro, Roberto; Petrocchi, Marinella; Spognardi, Angelo; Tesconi, Maurizio / Fame for sale: Efficient detection of fake Twitter followers.
Publication: Research - peer-review › Journal article – Annual report year: 2015

Orfanidis, Charalampos; Zhang, Yue; Dragoni, Nicola / Fault Detection in WSNs - An Energy Efficiency Perspective Towards Human-Centric WSNs.
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Pop, Paul (Editor); Alistar, Mirela (Editor); Stuart, Elena (Editor); Madsen, Jan (Editor) / Fault-Tolerant Digital Microfluidic Biochips: Compilation and Synthesis.
Publication: Research › Book – Annual report year: 2015

Gavrilut, Voica Maria; Tamas-Selicean, Domitian; Pop, Paul / Fault-Tolerant Topology Selection for TTEthernet Networks.
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Puffitsch, Wolfgang / Fernando: An educational ahead-of-time bytecode compiler.
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Pop, Paul / Flow-Based Biochips: Fault-Tolerant Design and Error Recovery.
Strøm, Torur Biskopstø; Schoeberl, Martin / Hardware Locks with Priority Ceiling Emulation for a Java Chip-Multiprocessor. 

Bonichsen, Lars Frydendal; Probst, Christian W.; Karlsson, Sven / Hardware Transactional Memory Optimization Guidelines, Applied to Ordered Maps. 

Pezzarossa, Luca; Kenn Toft, Jakob; Lønbæk, Jesper; Barnes, Russell / Implementation of an Ethernet-Based Communication Channel for the Patmos Processor. 

Mahmood Rajpoot, Qasim; Jensen, Christian D.; Krishnan, Ram / Integrating Attributes into Role-Based Access Control. 

Pezzarossa, Luca; Sørensen, Rasmus Bo; Schoeberl, Martin; Sparsø, Jens / Interfacing Hardware Accelerators to a Time-Division Multiplexing Network-on-Chip. 


Serensen, Rasmus Bo; Puffitsch, Wolfgang; Schoeberl, Martin; Sparsø, Jens / Message Passing on a Time-predictable Multicore Processor. 

Araci, Ismail Emre; Pop, Paul; Chakrabarty, Krishnendu / Microfluidic very large-scale integration for biochips: Technology, testing and fault-tolerant design. 

Dung, Phan Anh; Hansen, Michael Reichhardt (Supervisor) / Modelling and Analysis for Cyber-Physical Systems: An SMT-based approach. 

Schoeberl, Martin; Serensen, Rasmus Bo; Sparsø, Jens / Models of Communication for Multicore Processors. 

Strøm, Torur Biskopstø; Schoeberl, Martin / Multiprocessor Priority Ceiling Emulation for Safety-Critical Java. 
Tamas-Selicean, Domitian; Pop, Paul; Steiner, Wilfried / **Timing Analysis of Rate Constrained Traffic for the TTEthernet Communication Protocol.**

Pop, Paul; Alistar, Mirela / **Towards droplet size-aware biochemical application compilation for AM-EWOD biochips.**

Mahmood Rajpoot, Qasim; Jensen, Christian D. / **Video Surveillance: Privacy Issues and Legal Compliance.**

Bjørner, Nikolaj; Dung, Phan Anh; Fleckenstein, Lars / **vZ - An Optimizing SMT Solver.**

Bjørner, Nikolaj; Dung, Phan Anh / **vZ - Maximal Satisfaction with Z3.**

Hansen, Zaza Nadja Lee; Herbert, Luke Thomas; Jacobsen, Peter / **Addressing production stops in the food industry.**

Patou, François; Pfreundt, Andrea; Zulfiqar, Azeem; Dimaki, Maria; Kjærgaard, Claus; Madsen, Jan; Svendsen, Winnie Edith / **A flexible mobile-device biosensing instrumentation platform for point-of-care medical diagnostics applications.**
2014. Poster session presented at 24th Anniversary World Congress on Biosensors, Melbourne, Australia.

Kotleas, Ioannis; Humphreys, Dean; Sørensen, Rasmus Bo; Kasapaki, Evangelia; Brandner, Florian; Sparso, Jens / **A Loosely Synchronizing Asynchronous Router for TDM-Scheduled NOCs.**

Fafoutis, Xenofon; Orfanidis, Charalampos; Dragoni, Nicola / **Altruistic Backoff: Collision Avoidance for Receiver-Initiated MAC Protocols for Wireless Sensor Networks.**
Sørensen, Rasmus Bo; Sparsø, Jens; Pedersen, Mark Ruvald; Haigaard, Jaspur / A Metaheuristic Scheduler for Time Division Multiplexed Network-on-Chip.
Publication: Research › Report – Annual report year: 2014

Sørensen, Rasmus Bo; Sparsø, Jens; Pedersen, Mark Ruvald; Haigaard, Jaspur / A Metaheuristic Scheduler for Time Division Multiplexed Network-on-Chip.
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Degasperi, Philipp; Hepp, Stefan; Puffitsch, Wolfgang; Schoeberl, Martin / A method cache for Patmos.
Publication: Research - peer-review › Conference article – Annual report year: 2014

Rios Rivas, Juan Ricardo; Schoeberl, Martin / An evaluation of safety-critical Java on a Java processor.
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Pfreundt, Andrea; Patou, Francois; Zulfiqar, Azeem; Dimaki, Maria; Madsen, Jan; Svendsen, Winnie Edith / A novel single-step, multipoint calibration method for instrumented Lab-on-Chip systems.
Publication: Research - peer-review › Poster – Annual report year: 2014

Hansen, Michael Reichhardt; Dung, Phan Anh; Brekling, Aske Wiid / A practical approach to model checking Duration Calculus using Presburger Arithmetic.
Publication: Research - peer-review › Journal article – Annual report year: 2013

Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Schleuniger, Pascal; Karlsson, Sven / A Synthesizable Multicore Platform for Microwave Imaging.
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Schoeberl, Martin; Chong, David VH; Puffitsch, Wolfgang; Sparsø, Jens / A Time-predictable Memory Network-on-Chip.
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Herbert, Luke Thomas; Hansen, Zaza Nadja Lee; Jacobsen, Peter / Automated evolutionary restructuring of workflows to minimise errors via stochastic model checking.
Hindborg, Andreas Erik; Schleuniger, Pascal; Jensen, Nicklas Bo; Walter, Maxwell; Brock-Nannestad, Laust; Bonnichsen, Lars Frydendal; Probst, Christian W.; Karlsson, Sven / **Automatic generation of application specific FPGA multicore accelerators.**

Schoeberl, Martin; Dalsgaard, Andreas Engelbrecht; Hansen, Rene Rydhof; Korsholm, Stephan E.; Ravn, Anders P.; Rios Rivas, Juan Ricardo; Strøm, Torur Biskopstø; Søndergaard, Hans / **Certifiable Java for Embedded Systems.**

Jensen, Nicklas Bo; Probst, Christian W.; Karlsson, Sven / **Code Commentary and Automatic Refactorings using Feedback from Multiple Compilers.**

Jensen, Nicklas Bo; Probst, Christian W.; Karlsson, Sven / **Collaborative Compiler Vectorization.**
2014. Poster session presented at 9th International Conference on High-Performance and Embedded Architectures and Compilers, Vienna, Austria.

Alistar, Mirela; Pop, Paul (Main supervisor); Madsen, Jan (Supervisor) / **Compilation and Synthesis for Fault-Tolerant Digital Microfluidic Biochips.**

Alistar, Mirela / **Compilation and Synthesis for Fault-Tolerant Digital Microfluidic Biochips (DMBs).**

Mottin, Julien; Pacull, François; Keryell, Ronan; Schleuniger, Pascal / **Compilation Tool Chains and Intermediate Representations.**

Jensen, Nicklas Bo; Karlsson, Sven; Probst, Christian W. / **Compiler Feedback using Continuous Dynamic Compilation during Development.**
Proceedings - Workshop on Dynamic Compilation Everywhere. 2014.

Brandner, Florian; Hepp, Stefan; Jordan, Alexander / **Critically: static profiling for real-time programs.**

Nannarelli, Alberto / **Decimal Engine for Energy-Efficient Multicore Processors.**

Vuckovic, Dusan; Madsen, Jan (Main supervisor) / **Design and Implementation of Energy Harvesting Powered Wireless Sensor Networks.**
Jensen, Nicklas Bo; Karlsson, Sven; Quarfot Nielsen, Niklas; Lee, Gregory L.; Ahn, Dong H.; Legendre, Matthew; Schulz, Martin / DySectAPI: Scalable Prescriptive Debugging.
Publication: Research › peer-review › Poster – Annual report year: 2014

Jensen, Nicklas Bo; Karlsson, Sven; Quarfot Nielsen, Niklas; Lee, Gregory L.; Ahn, Dong H.; Legendre, Matthew; Schulz, Martin / DySectAPI: Scalable Prescriptive Debugging.
Publication: Research › peer-review › Conference abstract for conference – Annual report year: 2014

Fernandez-Gago, Carmen; Jensen, Christian D. / Editorial: Thematic series on best articles from IFIPTM and PST.
Publication: Research › Editorial – Annual report year: 2014

Bonnichsen, Lars Frydendale; Karlsson, Sven; Probst, Christian W. / ELB-trees - Efficient Lock-free B+trees.
2014. Poster session presented at 9th International Conference on High-Performance and Embedded Architectures and Compilers, Vienna, Austria.
Publication: Research › Poster – Annual report year: 2014

Bonnichsen, Lars Frydendale; Karlsson, Sven; Probst, Christian W. / ELB-trees - Efficient Lock-free B+trees.
Publication: Research › Conference abstract in proceedings – Annual report year: 2014

Ahmed, Naveed; Pöpper, Christina; Capkun, Srdjan / Enabling short fragments for uncoordinated spread spectrum communication.
Publication: Research › peer-review › Article in proceedings – Annual report year: 2014

Publication: Research › peer-review › Article in proceedings – Annual report year: 2014

Publication: Research › peer-review › Article in proceedings – Annual report year: 2014

Herbert, Luke Thomas; Hansen, Zaza Nadja Lee; Jacobsen, Peter; Cunha, Pedro / Evolutionary optimisation of production materials workflow processes.
Disruptive Innovation in Manufacturing Engineering towards the 4th Industrial Revolution. 8th International Conference on Digital Enterprise Technology - DET 2014. 2014.
Publication: Research › peer-review › Article in proceedings – Annual report year: 2014
Herbert, Luke Thomas; Hansen, Zaza Nadja Lee; Jacobsen, Peter; Cunha, Pedro / Evolutionary optimization of production materials workflow processes.
Publication: Research - peer-review › Conference article – Annual report year: 2014

Brock-Nannestad, Laust; DelSignore, John; Squyres, Jeffrey M.; Karlsson, Sven ; Mohror, Kathryn / Exposing MPI Objects for Debugging.
Publication: Research - peer-review › Poster – Annual report year: 2014

Brock-Nannestad, Laust; DelSignore, John; Squyres, Jeffrey M.; Karlsson, Sven ; Mohror, Kathryn / Exposing MPI Objects for Debugging.
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2014

Nannarelli, Alberto; Seidel, Peter-Michael; Tang, Ping Tak Peter / Guest Editors’ Introduction: Special Section on Computer Arithmetic.
Publication: Research - peer-review › Journal article – Annual report year: 2014

Hindborg, Andreas Erik; Karlsson, Sven / Hardware Realization of an FPGA Processor - Operating System Call Offload and Experiences.
Publication: Research › Poster – Annual report year: 2014

Hindborg, Andreas Erik; Karlsson, Sven / Hardware Realization of an FPGA Processor - Operating System Call Offload and Experiences.
Publication: Research - peer-review › Conference abstract in proceedings – Annual report year: 2014

Hindborg, Andreas Erik; Schleuniger, Pascal; Jensen, Nicklas Bo; Karlsson, Sven / Hardware Realization of an FPGA Processor – Operating System Call Offload and Experiences.
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Nielsen, Glen ; Vedel, Michael ; Jensen, Christian D. / Improving Usability of Passphrase Authentication.
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Abbaspourseyyedi, Sahar; Jordan, Alexander; Brandner, Florian / Lazy Spilling for a Time-Predictable Stack Cache: Implementation and Analysis.
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Brock-Nannestad, Laust; Karlsson, Sven / Library Support for Resource Constrained Accelerators.
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Gan, Junhe; Pop, Paul (Main supervisor); Madsen, Jan (Supervisor) / Tradeoff analysis for Dependable Real-Time Embedded Systems during the Early Design Phases. Kgs. Lyngby: Technical University of Denmark (DTU), 2014. 135 p. (DTU Compute PHD-2014; No. 330).
Publication: Research › Ph.D. thesis – Annual report year: 2014

Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2014

Publication: Research - peer-review › Poster – Annual report year: 2014

Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Publication: Research - peer-review › Article in proceedings – Annual report year: 2014
Müller, Christoph; Malkowsky, Steffen; Andersson, Oskar; Mohammadi, Babak; Sparso, Jens; Rodrigues, Joachim / A 65-nm CMOS Area Optimized De-synchronization Flow for sub-Vth Designs.
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Marchegiani, Letizia; Fafoutis, Xenofon / A Behavioral Study on the Effects of Rock Music on Auditory Attention.
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Model Checking Business Processes. American Society of Mechanical Engineers, 2013. p. 3-40 (Advances in Computational Sciences and Information in Engineering (ACIER)).
Publication: Research - peer-review › Book chapter – Annual report year: 2013

Sparsø, Jens; Kasapaki, Evangelia; Schoeberl, Martin / An area-efficient network interface for a TDM-based Network-on-Chip.
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Tseng, Kai-Han; You, Sheng-Chi; Minhass, Wajid Hassan; Ho, Tsung-Yi; Pop, Paul / A network-flow based valve-switching aware binding algorithm for flow-based microfluidic biochips.
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Lakis, Edgar; Schoeberl, Martin / An SDRAM controller for real-time systems.
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Alistar, Mirela; Pop, Paul; Madsen, Jan / Application-specific fault-tolerant architecture synthesis for digital microfluidic biochips.
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Jozwiak, Lech; Lindwer, Menno; Corvino, Rosilde; Meloni, Paolo; Micconi, Laura; Madsen, Jan; Diken, Erkan; Gangadharan, Deepak; Jordans, Roel; Pomata, Sebastianio; Pop, Paul; Tuveri, Giuseppe; Raffo, Luigi; Notarangelo, Giuseppe / ASAM: Automatic architecture synthesis and application mapping.
Publication: Research - peer-review › Journal article – Annual report year: 2014

Abbaspourseyyedi, Sahar; Brandner, Florian; Schoeberl, Martin / A Time-predictable Stack Cache.
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Abbaspour, Sahar; Brandner, Florian; Schoeberl, Martin / A Time-predictable Stack Cache.
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Publication: Research - peer-review › Journal article – Annual report year: 2013
Alistar, Mirela; Pop, Paul; Madsen, Jan / Biochemical Application Compilation and Architecture Synthesis for Fault-Tolerant Digital Microfluidic Biochips. 2013. Poster session presented at Lab-on-a-Chip World Congress, San Diego, CA, United States.
Publication: Research - peer-review › Poster – Annual report year: 2014

Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Publication: Research - peer-review › Journal article – Annual report year: 2013

Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Publication: Research - peer-review › Journal article – Annual report year: 2013

Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Publication: Research › Poster – Annual report year: 2014

Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Jakobsen, Mikkel Koeoed; Madsen, Jan (Main supervisor); Hansen, Michael Reichhardt (Supervisor) / Formal methods for design and simulation of embedded systems. Kgs. Lyngby : Technical University of Denmark (DTU), 2013. 190 p. (PHD-2013; No. 289).
Publication: Research › Ph.D. thesis – Annual report year: 2014

Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Gruian, Flavius; Schoeberl, Martin / **Hardware support for CSP on a Java chip multiprocessor.** In: Microprocessors and Microsystems, Vol. 37, No. 4-5, 2013, p. 472-481.

Micconi, Laura; Corvino, Rosilde; Gangadharan, Deepak; Madsen, Jan; Pop, Paul; Jozwiak, Lech / **Hierarchical DSE for multi-ASIP platforms.** 2013 2nd Mediterranean Conference on Embedded Computing (MECO). IEEE, 2013, p. 50-53.


Vithanage, Madava D.; Fafoutis, Xenophon; Andersen, Claus Bo; Dragoni, Nicola / **Medium Access Control for Thermal Energy Harvesting in Advanced Metering Infrastructures.** 2013 IEEE EUROCON. IEEE, 2013. p. 291-299.


Schmidt, Morten Foged; Minhass, Wajid Hassan; Pop, Paul; Madsen, Jan / **Modeling and Simulation Framework for Flow-Based Microfluidic Biochips.** 2013 Symposium on Design, Test, Integration and Packaging of MEMS/MOEMS (DTIP). IEEE, 2013.


