Activity-based DEVS modeling
Publication: Research - peer-review › Journal article – Annual report year: 2018

An Integrated Framework to Specify Domain-Specific Modeling Languages
Publication: Research - peer-review › Article in proceedings – Annual report year: 2018

AntibIoTic: Protecting IoT Devices Against DDoS Attacks
Publication: Research - peer-review › Article in proceedings – Annual report year: 2018

DDoS-Capable IoT Malwares: Comparative Analysis and Mirai Investigation
Publication: Research - peer-review › Journal article – Annual report year: 2018

Double-Loop Health Technology: Enabling Socio-technical Design of Personal Health Technology in Clinical Practice
Publication: Research - peer-review › Book chapter – Annual report year: 2018

Face Recognition using Approximate Arithmetic
Publication: Research › Report – Annual report year: 2018

Towards Domain-specific Flow-based Languages
Publication: Research - peer-review › Article in proceedings – Annual report year: 2018

Supporting smartphone-based behavioral activation: A simulation study
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Improving performance of single-path code through a time-predictable memory hierarchy
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Pin-count reduction for continuous flow microfluidic biochips
Publication: Research - peer-review › Journal article – Annual report year: 2017
A Controller for Dynamic Partial Reconfiguration in FPGA-Based Real-Time Systems
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Activity-Based Collaboration for Interactive Spaces
Publication: Research - peer-review › Book chapter – Annual report year: 2017

A language-based approach to modelling and analysis of Twitter interactions
Publication: Research - peer-review › Journal article – Annual report year: 2017

A Multi-Format Floating-Point Multiplier for Power-Efficient Operations
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Analysis of DDoS-capable IoT malwares
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

An Introduction to Malware
Publication: Education › Compendium/lecture notes – Annual report year: 2017

A resource-efficient network interface supporting low latency reconfiguration of virtual circuits in time-division multiplexing networks-on-chip
Publication: Research - peer-review › Journal article – Annual report year: 2017

A Shared Scratchpad Memory with Synchronization Support
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

A Study on Text-Score Disagreement in Online Reviews
Fazzolari, M., Cozza, V., Petrocchi, M. & Spognardi, A. 2017 In : Cognitive Computation. 9, 5, p. 689-701
Publication: Research - peer-review › Journal article – Annual report year: 2017

A systematic and practical method for selecting systems engineering tools
Publication: Research - peer-review › Article in proceedings – Annual report year: 2018

A Top-down Approach to Genetic Circuit Synthesis and Optimized Technology Mapping
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017
Best practice for caching of single-path code
Publication: Research - peer-review › Journal article – Annual report year: 2017

Best Practice for Caching of Single-Path Code
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Big Data hvor N=1
Publication: Research › Book chapter – Annual report year: 2017

Can Real-Time Systems Benefit from Dynamic Partial Reconfiguration?
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Can smartphone-based electronic markers discriminate between patients with bipolar disorder, healthy first-degree relatives and healthy control individuals
Publication: Research - peer-review › Conference abstract in journal – Annual report year: 2017

Collaborative Affordances of Medical Records
Publication: Research - peer-review › Journal article – Annual report year: 2017

Co-Simulation of Cyber-Physical System with Distributed Embedded Control
Publication: Research › Ph.D. thesis – Annual report year: 2017

Digital Arithmetic: Division Algorithms
Publication: Research - peer-review › Book chapter – Annual report year: 2017

Distributed co-simulation of embedded control software with exhaust gas recirculation water handling system using INTO-CPS
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

EEG source imaging assists decoding in a face recognition task
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Fast architecture-level synthesis of fault-tolerant flow-based microfluidic biochips
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Fault-Tolerant Topology and Routing Synthesis for IEEE Time-Sensitive Networking
Helbredstjek af dansk sundhedsteknologi: Sektorudviklingsrapport
PUBLICATION: Commissioned ‹ Report – Annual report year: 2017

High-level synthesis for reduction of WCET in real-time systems
PUBLICATION: Research - peer-review ‹ Article in proceedings – Annual report year: 2017

High Performance with Prescriptive Optimization and Debugging
PUBLICATION: Research › Ph.D. thesis – Annual report year: 2017

Improving Loop Dependence Analysis
PUBLICATION: Research - peer-review › Journal article – Annual report year: 2017

Logic analysis and verification of n-input genetic logic circuits
PUBLICATION: Research - peer-review › Article in proceedings – Annual report year: 2017

Methods and Tools for the Analysis, Verification and Synthesis of Genetic Logic Circuits,
PUBLICATION: Research › Ph.D. thesis – Annual report year: 2017

Microservices: Yesterday, Today, and Tomorrow
PUBLICATION: Research - peer-review › Journal article – Annual report year: 2017

Paper-Based Digital Microfluidic Chip for Multiple Electrochemical Assay Operated by a Wireless Portable Control System
PUBLICATION: Research - peer-review › Journal article – Annual report year: 2017

Performance Improvements and Congestion Reduction for Routing-based Synthesis for Digital Microfluidic Blorchips
PUBLICATION: Research - peer-review › Journal article – Annual report year: 2016

Real-Time Audio Processing on the T-CREST Multicore Platform
PUBLICATION: Research - peer-review › Article in proceedings – Annual report year: 2017

Reducing the rate and duration of Re- ADMISsions among patients with unipolar disorder and bipolar disorder using smartphone-based monitoring and treatment - the RADMIS trials: Study protocol for two randomized controlled trials
Faurholt-Jepsen, M., Frost, M., Martiny, K., Tuxen, N., Rosenberg, N., Busk, J., Winther, O., Bardram, J. E. & Kessing, L. V. 2017 In : Trials. 18, 1, 13 p., 277
PUBLICATION: Research - peer-review › Journal article – Annual report year: 2017
RNS Applications in Digital Signal Processing

Publication: Research - peer-review › Book chapter – Annual report year: 2017

Robust Throughput Boosting for Low Latency Dynamic Partial Reconfiguration

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

Safe Cooperating Cyber-Physical Systems using Wireless Communication

Publication: Research - peer-review › Journal article – Annual report year: 2017

Scheduling and Fluid Routing for Flow-Based Microfluidic Laboratories-on-a-Chip

Publication: Research - peer-review › Journal article – Annual report year: 2017

Security And Privacy Issues in Healthcare Monitoring Systems: A Case Study

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

Security And Privacy Issues in Healthcare Monitoring Systems: A Case Study

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

Security flows in OAuth 2.0 framework: A case study

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

Simulation Approach for Timing Analysis of Genetic Logic Circuits

Publication: Research - peer-review › Journal article – Annual report year: 2017

Social Fingerprinting: detection of spambot groups through DNA-inspired behavioral modeling

Publication: Research - peer-review › Journal article – Annual report year: 2017

Synthesis of on-chip control circuits for mVLSI biochips

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

System-Level Sensitivity Analysis of SiNW-bioFET-Based Biosensing Using Lockin Amplification

Publication: Research - peer-review › Journal article – Annual report year: 2017
Taming Living Logic using Formal Methods
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Test-Driven, Model-Based Systems Engineering.
Publication: Research › Ph.D. thesis – Annual report year: 2017

Test-driven modeling and development of cloud-enabled cyber-physical smart systems
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

The Bipolar Illness Onset study: research protocol for the BIO cohort study
Publication: Research - peer-review › Journal article – Annual report year: 2017

The Internet of Hackable Things
Publication: Research - peer-review › Journal article – Annual report year: 2017

Timing analysis of rate-constrained traffic in TTEthernet using network calculus
Publication: Research - peer-review › Journal article – Annual report year: 2017

Timing organization of a real-time multicore processor
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

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

Volume management for fault-tolerant continuous-flow microfluidics
Publication: Research - peer-review › Conference article – Annual report year: 2017

Waste-aware fluid volume assignment for flow-based microfluidic biochips
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

A Framework for Dynamically-Loaded Hardware Library (HLL) in FPGA Acceleration
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016
Automatic Functionality Assignment to AUTOSAR Multicore Distributed Architectures
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Avionics Applications on a Time-Predictable Chip-Multiprocessor
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Behavioral activities collected through smartphones and the association with illness activity in bipolar disorder
Publication: Research - peer-review › Journal article – Annual report year: 2016

Bioinspired Security Analysis of Wireless Protocols
Petrocchi, M., Spognardi, A. & Santi, P. 2016 In : Mobile Networks and Applications. 21, 1, p. 139-148
Publication: Research - peer-review › Journal article – Annual report year: 2016

Clock domain crossing modules for OCP-style read/write interfaces
Publication: Research › Report – Annual report year: 2016

Dedicated workspaces: Faster resumption times and reduced cognitive load in sequential multitasking
Publication: Research - peer-review › Journal article – Annual report year: 2016

Design and Simulation of a Quaternary Memory Cell based on a Physical Memristor
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Designing Context-Aware Cognitive Behavioral Therapy for Unipolar and Bipolar Disorders
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Design optimization for security-and safety-critical distributed real-time applications
Publication: Research - peer-review › Journal article – Annual report year: 2016

Design Optimization of Cyber-Physical Distributed Systems using IEEE Time-sensitive Networks (TSN)
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

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

DNA-Inspired Online Behavioral Modeling and its Application to Spambot Detection
Publication: Research - peer-review › Journal article – Annual report year: 2016
D-VASim: An Interactive Virtual Laboratory Environment for the Simulation and Analysis of Genetic Circuits
Publication: Research - peer-review › Journal article – Annual report year: 2016

D-VASim: A Software Tool to Simulate and Analyze Genetic Logic Circuits
Baig, H. & Madsen, J. 2016 Case study.
Publication: Research › Internet publication – Annual report year: 2016

Dynamically-Loaded Hardware Libraries (HLL) Technology for Audio Applications
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Efficient Worst-Case Execution Time Analysis of Dynamic Branch Prediction
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Electronic self-monitoring of mood using IT platforms in adult patients with bipolar disorder: A systematic review of the validity and evidence
Faurholt-Jepsen, M., Munkholm, K., Frost, M., Bardram, J. E. & Kessing, L. V. 2016 In: Molecular Psychiatry. 16, 7, p. 1-14
Publication: Research - peer-review › Journal article – Annual report year: 2016

Evaluation of Professional Cloud Password Management Tools
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

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

Experimental Measures of News Personalization in Google News
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

FMI for Co-Simulation of Embedded Control Software
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

FPGA Acceleration by Dynamically-Loaded Hardware Libraries
Publication: Research › Report – Annual report year: 2016

Game-based verification and synthesis
SafeDroid: A Distributed Malware Detection Service for Android
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Safety-critical Java for embedded systems
Publication: Research - peer-review › Journal article – Annual report year: 2016

Security And Privacy Issues in Health Monitoring Systems: eCare@Home Case Study
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Smartphone-based biosensing platform evolution: implementation of electrochemical analysis capabilities
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

State-based Communication on Time-predictable Multicore Processors
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Support for the Logical Execution Time Model on a Time-predictable Multicore Processor
Publication: Research - peer-review › Conference article – Annual report year: 2016

Synthesis of Application-Specific Fault-Tolerant Digital Microfluidic Biochip Architectures
Publication: Research - peer-review › Journal article – Annual report year: 2016

Synthesis of railway-signaling plans using reachability games
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

TACLeBench: A benchmark collection to support worst-case execution time research
Publication: Research - peer-review › Journal article – Annual report year: 2017

The Personal Health Technology Design Space
Publication: Research - peer-review › Journal article – Annual report year: 2016

The SafeCOP ECSEL Project: Safe Cooperating Cyber-Physical Systems Using Wireless Communication
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016
Time-Predictable Communication on a Time-Division Multiplexing Network-on-Chip Multicore
Publication: Research › Ph.D. thesis – Annual report year: 2016

Time-predictable Stack Caching
Publication: Research › Ph.D. thesis – Annual report year: 2016

Time-Predictable Virtual Memory
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

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

Towards Unifying OpenMP Under the Task-Parallel Paradigm Implementation and Performance of the taskloop Construct
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Traffic class assignment for mixed-criticality frames in TTEthernet
Publication: Research - peer-review › Conference article – Annual report year: 2016

Voice analysis as an objective state marker in bipolar disorder
Faurholt-Jepsen, M., Busk, J., Frost, M., Vinberg, M., Christensen, E. M., Winther, O., Bardram, J. E. & Kessing, L. V. 2016 In : Translational Psychiatry. 6, 7, 8 p., e856
Publication: Research - peer-review › Journal article – Annual report year: 2016

Voice analysis as an objective state marker in bipolar disorder
Publication: Research - peer-review › Conference abstract in journal – Annual report year: 2016

Why Hackers Love eHealth Applications
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Adaptive Multipath Key Reinforcement for Energy Harvesting Wireless Sensor Networks
Publication: Research - peer-review › Conference article – Annual report year: 2015

Publication: Research - peer-review › Journal article – Annual report year: 2015

A Framework and Classification for Fault Detection Approaches in Wireless Sensor Networks with an Energy Efficiency Perspective
An approach to multicore parallelism using functional programming: A case study based on Presburger Arithmetic

An Asynchronous Time-Division-Multiplexed Network-on-Chip for Real-Time Systems

A Probabilistic Approach for the System-Level Design of Multi-ASIP Platforms

A Scalable Prescriptive Parallel Debugging Model

A Time-Composable Operating System for the Patmos Processor

Characterization of RNS multiply-add units for power efficient DSP

Continuous Context-Aware Device Comfort Evaluation Method

Continuous-flow biochips: Current platforms and emerging research challenges: Special Session

Continuous-Flow Biochips: Technology, Physical Design Methods and Testing
Fault-Tolerant Topology Selection for TTEthernet Networks
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

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

Flow-Based Biochips: Fault-Tolerant Design and Error Recovery
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Hardware Locks with Priority Ceiling Emulation for a Java Chip-Multiprocessor
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Hardware Transactional Memory Optimization Guidelines, Applied to Ordered Maps
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Implementation of an Ethernet-Based Communication Channel for the Patmos Processor
Publication: Research › Report – Annual report year: 2015

Integrating Attributes into Role-Based Access Control
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Interfacing Hardware Accelerators to a Time-Division Multiplexing Network-on-Chip
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Introduction
Publication: Research › Book chapter – Annual report year: 2015

Message Passing on a Time-predictable Multicore Processor
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Microfluidic very large-scale integration for biochips: Technology, testing and fault-tolerant design
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015
Modelling and Analysis for Cyber-Physical Systems: An SMT-based approach
Publication: Research › Ph.D. thesis – Annual report year: 2015

Models of Communication for Multicore Processors
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Multiprocessor Priority Ceiling Emulation for Safety-Critical Java
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

No Need Knowing Numerous Neighbours: Towards a Realizable Interpretation of MLSL
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Off-line mapping of multi-rate dependent task sets to many-core platforms
Publication: Research - peer-review › Journal article – Annual report year: 2015

Publication: Research › Ph.D. thesis – Annual report year: 2015

Optimal Sceduling of Stochastic Production Processes Through Model Checking
Publication: Research - peer-review › Book chapter – Annual report year: 2014

Persistence-Based Branch Misprediction Bounds for WCET Analysis
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Physical trust-based persistent authentication
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Pin count-aware biochemical application compilation for mVLSI biochips
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Power and thermal efficient numerical processing
Publication: Research - peer-review › Book chapter – Annual report year: 2015
Quantifying system safety: A comparison of the SBOAT & Safety Barrier Manager tools
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Receiver-initiated medium access control protocols for wireless sensor networks
Publication: Research - peer-review › Journal article – Annual report year: 2014

Redundancy Optimization for Error Recovery in Digital Microfluidic Biochips
Publication: Research - peer-review › Journal article – Annual report year: 2015

Reliability in Warehouse-Scale Computing: Why Low Latency Matters
Nannarelli, A. 2015 Proceedings of MEDIAN Finale - Workshop on Manufacturable and Dependable Multicore Architectures at Nanoscale. p. 2-6
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Safety-critical Java on a time-predictable processor
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Scala for Real-Time Systems?
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Stack Caching Using Split Data Caches
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Synthesis of Biochemical Applications on Digital Microfluidic Biochips with Operation Execution Time Variability
Alistar, M. & Pop, P. 2015 In : Integration. 51, September, p. 158-168
Publication: Research - peer-review › Journal article – Annual report year: 2015

System-level synthesis of multi-ASIP platforms using an uncertainty model
Publication: Research - peer-review › Journal article – Annual report year: 2015

T-CREST: Time-predictable multi-core architecture for embedded systems
Publication: Research - peer-review › Journal article – Annual report year: 2015

Test-driven modeling of embedded systems
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

The Argo NOC: Combining TDM and GALS
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015
Thermal Aware Floorplanning Incorporating Temperature Dependent Wire Delay Estimation
Publication: Research - peer-review › Journal article – Annual report year: 2015

Time-division multiplexing vs network calculus: A comparison
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Timing Analysis of Rate Constrained Traffic for the TTEthernet Communication Protocol
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Towards droplet size-aware biochemical application compilation for AM-EWOD biochips
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Video Surveillance: Privacy Issues and Legal Compliance
Publication: Research - peer-review › Book chapter – Annual report year: 2015

vZ - An Optimizing SMT Solver
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

vZ - Maximal Satisfaction with Z3
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Addressing production stops in the food industry
Publication: Research - peer-review › Journal article – Annual report year: 2014

A flexible mobile-device biosensing instrumentation platform for point-of-care medical diagnostics applications
Publication: Research - peer-review › Poster – Annual report year: 2014

A flexible mobile-device biosensing instrumentation platform for point-of-care medical diagnostics applications
Publication: Research - peer-review › Conference abstract in proceedings – Annual report year: 2014

Alignment of Memory Transfers of a Time-Predictable Stack Cache
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014
A Loosely Synchronizing Asynchronous Router for TDM-Scheduled NOCs
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

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

A Metaheuristic Scheduler for Time Division Multiplexed Network-on-Chip
Publication: Research › Report – Annual report year: 2014

A Metaheuristic Scheduler for Time Division Multiplexed Network-on-Chip
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

A method cache for Patmos
Publication: Research - peer-review › Conference article – Annual report year: 2014

An evaluation of safety-critical Java on a Java processor
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

A novel single-step, multipoint calibration method for instrumented Lab-on-Chip systems
Publication: Research - peer-review › Conference abstract in proceedings – Annual report year: 2014

A novel single-step, multipoint calibration method for instrumented Lab-on-Chip systems
Publication: Research - peer-review › Conference abstract in proceedings – Annual report year: 2014

A practical approach to model checking Duration Calculus using Presburger Arithmetic
Publication: Research - peer-review › Journal article – Annual report year: 2013

Argo: A Time-Elastic Time-Division-Multiplexed NOC using Asynchronous Routers
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

A Synthesizable Multicore Platform for Microwave Imaging
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014
Decimal Engine for Energy-Efficient Multicore Processors
Nannarelli, A. 2014 *Proceedings of the 22nd IFIP/IEEE International Conference on Very Large Scale Integration (VLSI-SoC)*. IEEE, 6 p.
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Design and Implementation of Energy Harvesting Powered Wireless Sensor Networks
Publication: Research › Ph.D. thesis – Annual report year: 2014

DySectAPI: Scalable Prescriptive Debugging
Publication: Research - peer-review › Poster – Annual report year: 2014

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

Editorial: Thematic series on best articles from IFIPTM and PST
Publication: Research › Editorial – Annual report year: 2014

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

ELB-trees - Efficient Lock-free B+trees
Publication: Research › Poster – Annual report year: 2014

ELB-trees - Efficient Lock-free B+trees
Publication: Research - peer-review › Conference abstract in proceedings – Annual report year: 2014

Enabling short fragments for uncoordinated spread spectrum communication
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Energy Efficient FPGA based Hardware Accelerators for Financial Applications
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Evaluating and Estimating the WCET Criticality Metric
Jordan, A. 2014 *Proceedings of the 11th Workshop on Optimizations for DSP and Embedded Systems (ODES ’14)*. Association for Computing Machinery, p. 11-18
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Evolutionary optimisation of production materials workflow processes
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014
Evolutionary optimization of production materials workflow processes
Publication: Research - peer-review › Conference article – Annual report year: 2014

Exposing MPI Objects for Debugging
Publication: Research - peer-review › Poster – Annual report year: 2014

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

Guest Editors’ Introduction: Special Section on Computer Arithmetic
Publication: Research - peer-review › Journal article – Annual report year: 2014

Hardware Realization of an FPGA Processor - Operating System Call Offload and Experiences
Hindborg, A. E. & Karlsson, S. 2014
Publication: Research › Poster – Annual report year: 2014

Hardware Realization of an FPGA Processor - Operating System Call Offload and Experiences
Publication: Research - peer-review › Conference abstract in proceedings – Annual report year: 2014

Hardware Realization of an FPGA Processor – Operating System Call Offload and Experiences
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Improving Usability of Passphrase Authentication
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Lazy Spilling for a Time-Predictable Stack Cache: Implementation and Analysis
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Library Support for Resource Constrained Accelerators
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Library Support for Resource Constrained Accelerators
Brock-Nannestad, L. & Karlsson, S. 2014
Publication: Research - peer-review › Poster – Annual report year: 2014

Medium Access Control in Energy Harvesting - Wireless Sensor Networks
Publication: Research › Ph.D. thesis – Annual report year: 2014
MPI Debugging with Handle Introspection
Publication: Research - peer-review › Paper – Annual report year: 2014

Online Synthesis for Operation Execution Time Variability on Digital Microfluidic Biochips
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Open Core Protocol (OCP) Clock Domain Crossing Interfaces
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Optimization of Partitioned Architectures to Support Soft Real-Time Applications
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Performance Aspects of Synthesizable Computing Systems
Publication: Research › Ph.D. thesis – Annual report year: 2014

Optimization of TTEthernet Networks to Support Best-Effort Traffic
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Programm language and tools for Multipurpose Lab-on-a-Chip Platforms
Publication: Research - peer-review › Poster – Annual report year: 2014

Remote Biometrics for Robust Persistent Authentication
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Reusable libraries for safety-critical Java
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Safe Asynchronous System Calls
Brock-Nannestad, L. & Karlsson, S. 2014
Publication: Research - peer-review › Poster – Annual report year: 2014
Safe Asynchronous System Calls - extended abstract
Brock-Nannestad, L. & Karlsson, S. 2014
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2014

Safety-Critical Java for Embedded Systems
Publication: Research › Ph.D. thesis – Annual report year: 2014

SBAT. A stochastic BPMN analysis tool
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

SBOAT: A Stochastic BPMN Analysis and Optimisation Tool
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Scope-Based Method Cache Analysis
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Security and Privacy in Video Surveillance: Requirements and Challenges
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

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

Smart Multicore Embedded Systems
Publication: Research - peer-review › Book – Annual report year: 2014

Publication: Research › Ph.D. thesis – Annual report year: 2014

Synthesis and Layout of an Asynchronous Network-on-Chip using Standard EDA Tools
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

T-Crest: A Time-Predictable Multi-Core Platform For Aerospace Applications
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014
Testing Infrastructure for Operating System Kernel Development
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

The Importance of Trust in Computer Security
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Tradeoff Analysis for Dependable Real-Time Embedded Systems during the Early Design Phases
Publication: Research › Ph.D. thesis – Annual report year: 2014

Twenty Years of Research on RNS for DSP: Lessons Learned and Future Perspectives
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Unit Testing Framework for Operating System Kernels
Walter, M. & Karlsson, S. 2014
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2014

Using Quantitative Stochastic Model Checking Tool to Increase Safety and Improve Efficiency in Production Processes
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

WCET-Based Comparison of an Instruction Scratchpad and a Method Cache
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Workflow Fault Tree Generation Through Model Checking
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

A 65-nm CMOS Area Optimized De-synchronization Flow for sub-V_T Designs
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

A Behavioral Study on the Effects of Rock Music on Auditory Attention
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013
Control Synthesis for the Flow-Based Microfluidic Large-Scale Integration Biochips
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Data cache organization for accurate timing analysis
Publication: Research - peer-review › Journal article – Annual report year: 2013

Detecting and Preventing Beacon Replay Attacks in Receiver-Initiated MAC Protocols for Energy Efficient WSNs
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Dynamic allocation and admission policies for QoS-aware provisioning systems
Publication: Research - peer-review › Journal article – Annual report year: 2013

ELB-trees an efficient and lock-free B-tree derivative
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

ELB-trees - Efficient Lock-free B+trees
Publication: Research › Poster – Annual report year: 2014

Explicit Precedence Constraints in Safety-Critical Java
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Formal methods for design and simulation of embedded systems
Publication: Research › Ph.D. thesis – Annual report year: 2014

Fourier Transform Spectrometer Controller for Partitioned Architectures
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Functional Programming Using F#
Publication: Research › Book – Annual report year: 2013

Hardware support for CSP on a Java chip multiprocessor
Gruian, F. & Schoeberl, M. 2013 In : Microprocessors and Microsystems. 37, 4-5, p. 472-481
Publication: Research - peer-review › Journal article – Annual report year: 2013

Hierarchical DSE for multi-ASIP platforms
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013
Precise Quantitative Analysis of Probabilistic Business Process Model and Notation Workflows
Publication: Research - peer-review › Journal article – Annual report year: 2013

Quality-Driven Model-Based Design of MultiProcessor Embedded Systems for Highlydemanding Applications
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Router Designs for an Asynchronous Time-Division-Multiplexed Network-on-Chip
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Social Networks and Collective Intelligence: A Return to the Agora
Mazzara, M., Biselli, L., Greco, P. P., Dragoni, N., Marraffa, A., Qamar, N. & de Nicola, S. 2013 Social Network Engineering for Secure Web Data and Services. IGI global, Ch. 5, p. 88-113
Publication: Research - peer-review › Book chapter – Annual report year: 2013

Static analysis of worst-case stack cache behavior
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Sustainable medium access control: Implementation and evaluation of ODMAC
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Sustainable Performance in Energy Harvesting - Wireless Sensor Networks
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Synthetic Aperture Radar Data Processing on an FPGA Multi-Core System
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Task Based Programming on Embedded Multicores
Schleuniger, P. & Karlsson, S. 2013
Publication: Research › Poster – Annual report year: 2014

The hardness of the functional orientation 2-color problem
Publication: Research - peer-review › Journal article – Annual report year: 2014

Truncated multipliers through power-gating for degrading precision arithmetic
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Tutorial: Digital microfluidic biochips: Towards hardware/software co-design and cyber-physical system integration
Publication: Research - peer-review › Conference abstract in proceedings – Annual report year: 2014
**Analysis and Optimization of Mixed-Criticality Applications on Partitioned Distributed Architectures**


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

**Attacker Modelling in Ubiquitous Computing Systems**


Publication: Research › Ph.D. thesis – Annual report year: 2014

**Direct Measurement of Power Dissipated by Monte Carlo Simulations on CPU and FPGA Platforms**


Publication: Research › Report – Annual report year: 2013

**Parallelizing More Loops with Compiler Guided Refactoring**


Publication: Research - peer-review › Article in proceedings – Annual report year: 2012

**Software Managed Cache for Parallel Systems**

Schleuniger, P. & Karlsson, S. 2012

Publication: Research › Poster – Annual report year: 2014

**System-Level Modeling and Synthesis Techniques for Flow-Based Microfluidic Very Large Scale Integration Biochips**


Publication: Research › Ph.D. thesis – Annual report year: 2013

**Timing Analysis of Mixed-Criticality Hard Real-Time Applications Implemented on Distributed Partitioned Architectures**


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

**Projects:**

**NordSecMob Master's Programme in Security and Mobile Computing - 2 continuation**

Stassen, F.

01/08/2016 → 31/07/2018

Project

**Reducing the rate and duration of re-admission among patients with unipolar and bipolar disorder using smartphone-based monitoring and treatment**

Bardram, J. E. & Winther, O.

01/03/2016 → 01/09/2019

Project

**UAV Ground Control System**

Stassen, F., Farabi Khanghahi, F., Steffensen, R. & Haaning, C.

30/11/2015 → 01/03/2016

Project

**COMPUTE Software Group**

Störrle, H., Madsen, J., Ersbøll, B. K. & Kristensen, K.

01/01/2015 → 31/12/2015

Project
Activities:

NordSecMob Network meeting (Event)
Stassen, F. (Reviewer)
19 Feb 2016
Activity: Communication › Peer review of manuscripts

10 years of NordSecMob: The NordSecMob journey
Stassen, F. (Invited speaker)
17 Oct 2015
Activity: Talks and presentations › Conference presentations

International Synthetic and Systems Biology Summer School
Baig, H. (Participant)
5 Jul 2015 → 9 Jul 2015
Activity: Attending an event › Participating in or organising workshops, courses, seminars etc.

NordSecMob Network meeting 2015 (Event)
Stassen, F. (Reviewer)
29 Jan 2015 → 30 Jan 2015
Activity: Research › Peer review of manuscripts

Erhvervs- og Vækstministeriet (External organisation)
Stassen, F. (Participant)
1 Jul 2014 → 30 Jun 2019
NordSecMob Network meeting 2014 (Event)
Stassen, F. (Reviewer)
29 Jan 2014 → 30 Jan 2014
Activity: Research › Peer review of manuscripts

Adaptivity Framework: libpappadapt
Bonnichsen, L. F. (Speaker)
22 Jan 2014
Activity: Talks and presentations › Conference presentations

NordSecMob Winter School on Innovation
Stassen, F. (Organizer)
6 Jan 2014 → 11 Jan 2014
Activity: Attending an event › Participating in or organising a conference

NordSecMob Network meeting 2013 (Event)
Stassen, F. (Reviewer)
24 Jan 2013 → 25 Jan 2013
Activity: Research › Peer review of manuscripts

6th ACM/IEEE International Symposium on Networks-on-Chip
Stassen, F. (Organizer)
9 May 2012 → 11 May 2012
Activity: Attending an event › Participating in or organising a conference

NordSecMob Network meeting 2012 (Event)
Stassen, F. (Reviewer)
1 Feb 2012 → 2 Feb 2012
Activity: Research › Peer review of manuscripts

KAIST-DTU Dual Degree Master Program in Computer Science
Stassen, F. (Other)
19 Jun 2010 → 31 Jul 2017
Activity: Other

Stassen, F. (Other)
1 Apr 2010 → 31 Aug 2017
Activity: Other

Erhvervs- og Vækstministeriet (External organisation)
Stassen, F. (Participant)
1 Jul 2009 → 30 Jun 2014
Activity: Membership › Membership of committees, commissions, boards, councils, associations, organisations, or similar

Nordic Master School In Innovative ICT (NMS iICT) (External organisation)
Stassen, F. (Participant)
16 Jan 2009 → 31 Aug 2014
Activity: Membership › Membership of research networks or expert groups

13th Nordic Workshop on Secure IT Systems
Stassen, F. (Organizer)
Activity: Attending an event › Participating in or organising a conference
HiPEAC - European Network of Excellence on High Performance and Embedded Architecture and Compilation (External organisation)
Karlssohn, S. (Participant)
27 Jan 2008 → 31 Dec 2018
Activity: Membership › Membership of research networks or expert groups

Økonomi- og Erhvervsministeriet (External organisation)
Stassen, F. (Participant)
1 Jul 2004 → 30 Jun 2009
Activity: Membership › Membership of committees, commissions, boards, councils, associations, organisations, or similar

Press clippings:

Wolfgang Puffitsch
03/02/2016
1 media contribution
Press / Media

Center for Cybersikkerhed efter sen Shellshock-advarsel: »ikke vores opgave at informere bredt om nye sårbarheder«
Luke Thomas Herbert
03/11/2014
1 media contribution
Press / Media

Professionelle hackere kunne trække stikket til Europa
Luke Thomas Herbert
24/10/2014
1 media contribution
Press / Media

Politits IT er guf for hackere
Luke Thomas Herbert
07/10/2014
1 media contribution
Press / Media

Hacker-angreb går efter energisektoren
Luke Thomas Herbert
04/10/2014
1 media contribution
Press / Media

Hacker angreb debat
Luke Thomas Herbert
04/10/2014
1 media contribution
Press / Media

Efterretningsskilder: Russiske cyberkrigere vil mærkægge Europa
Luke Thomas Herbert
03/10/2014
1 media contribution
Press / Media
Hackere angriber energinettet
Luke Thomas Herbert
03/10/2014
1 media contribution
Press / Media

Patch-kaos i kølvandet på Shellshock: Flere sikkerhedshuller skaber forvirring
Luke Thomas Herbert
01/10/2014
1 media contribution
Press / Media

It-sikkerhed, især i forhold til offentlige data
Luke Thomas Herbert
07/05/2014
1 media contribution
Press / Media

It-sikkerhed, især i forhold til offentlige data
Luke Thomas Herbert
07/05/2014
1 media contribution
Press / Media

Professor: Vores samfund har taget for let på al persondatasikkerhed: Personfølsomme oplysninger er blevet kompromitteret
Luke Thomas Herbert
07/05/2014
1 media contribution
Press / Media

Mørkenettet flyder med børneporno og narko
Luke Thomas Herbert
13/11/2013
1 media contribution
Press / Media

Luke Thomas Herbert
10/11/2013
1 media contribution
Press / Media