Publications:

Replicated Computations Results (RCR) report for "A holistic approach for collaborative workload execution in volunteer clouds"
Vandin, A. 2018 In : ACM Transactions on Modeling and Computer Simulation. 28, 2, 3 p., 15
Publication: Research - peer-review › Journal article – Annual report year: 2018

Content dependent information flow control
Nielsen, H. R. & Nielsen, F. 1 Feb 2017 In : Journal of Logical and Algebraic Methods in Programming. 87, p. 6-32
Publication: Research - peer-review › Journal article – Annual report year: 2017

A coordination language for databases
Publication: Research - peer-review › Journal article – Annual report year: 2016

Asynchronous Distributed Execution of Fixpoint-Based Computational Fields
Publication: Research - peer-review › Journal article – Annual report year: 2018

Atomistic Galois insertions for flow sensitive integrity
Nielsen, F. & Nielsen, H. R. 2017 In : Computer Languages, Systems and Structures. 50, p. 82-107
Publication: Research - peer-review › Journal article – Annual report year: 2017

Automated specification and verification of Web-based applications
Ter Beek, M. H. & Lluch Lafuente, A. 2017 In : Journal of Logical and Algebraic Methods in Programming. 87, p. 51-51
Publication: Research › Editorial – Annual report year: 2017

BProVe: A formal verification framework for business process models
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

BProVe: Tool support for business process verification
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Choreographing Cyber-Physical Distributed Control Systems for the Energy Sector
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Effect-driven QuickChecking of compilers
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Formal Analysis of Graphical Security Models
An Adaptive Middleware for Improved Computational Performance
Publication: Research › Ph.D. thesis – Annual report year: 2016

Analysis of Security Protocols in Embedded Systems
Publication: Research › Ph.D. thesis – Annual report year: 2016

A Parametric Abstract Domain for Lattice-Valued Regular Expressions
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

A Process Framework for Designing Software Reference Architectures for Providing Tools as a Service
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Attack tree analysis for insider threats on the IoT using isabelle
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Enforcing Availability in Failure-Aware Communicating Systems
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Formal modelling and analysis of socio-technical systems
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Future-dependent Flow Policies with Prophetic Variables
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Guaranteeing Privacy-Observing Data Exchange
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Iterated Process Analysis over Lattice-Valued Regular Expressions
Model Based Analysis of Insider Threats

Modelling and Verifying Communication Failure of Hybrid Systems in HCSP

Preface: Special section on Graph Inspection and Traversal Engineering (GRAPHITE 2014)

Quantitative Verification and Synthesis of Attack-Defence Scenarios

Security protocol specification and verification with AnBx

Security Protocols: Specification, Verification, Implementation, and Composition

Statistical Model Checking for Product Lines

The attack navigator

The Navigation Metaphor in Security Economics

Towards Static Analysis of Policy-Based Self-adaptive Computing Systems

Towards Unifying OpenMP Under the Task-Parallel Paradigm Implementation and Performance of the taskloop Construct
Transforming Graphical System Models to Graphical Attack Models

Understanding How Components of Organisations Contribute to Attacks

A calculus for attribute-based communication

A calculus of quality for robustness against unreliable communication
Nielsen, H. R., Nielsen, F. & Vigo, R. 2015 In : The Journal of Logic and Algebraic Programming. 84, 5, p. 611-639

A Fixpoint-Based Calculus for Graph-Shaped Computational Fields

Alice and Bob: Reconciling Formal Models and Implementation

A Probabilistic Analysis Framework for Malicious Insider Threats

A SAT-Based Analysis of a Calculus for Wireless Sensor Networks

A Scalable Prescriptive Parallel Debugging Model

Attack Tree Generation by Policy Invalidation
Protocol-Based Verification of Message-Passing Parallel Programs
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Quantitative Analysis of Probabilistic Models of Software Product Lines with Statistical Model Checking
Publication: Research - peer-review › Conference article – Annual report year: 2015

Reconciling White-Box and Black-Box Perspectives on Behavioral Self-adaptation
Publication: Research - peer-review › Book chapter – Annual report year: 2015

Replica-Based High-Performance Tuple Space Computing
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Replicating Data for Better Performances in X10
Publication: Research - peer-review › Book chapter – Annual report year: 2016

Set-Pi: Set Membership pi-Calculus
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Statistical analysis of probabilistic models of software product lines with quantitative constraints
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Stochastic Model Checking of the Stochastic Quality Calculus
Publication: Research - peer-review › Book chapter – Annual report year: 2015

Systematic derivation of correct variability-aware program analyses
Publication: Research - peer-review › Journal article – Annual report year: 2015

The SCEL Language: Design, Implementation, Verification
Publication: Research - peer-review › Book chapter – Annual report year: 2015
Combining Generated Data Models with Formal Invalidation for Insider Threat Analysis
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Compiler Feedback using Continuous Dynamic Compilation during Development
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

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

Denial-of-Service Security Attack in the Continuous-Time World
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

DySectAPI: Scalable Prescriptive Debugging
Publication: Research - peer-review › Poster – 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

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

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

Formal Security Analysis of the MaCAN Protocol.
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Foundational aspects of security
Publication: Research › Editorial – 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

ICT-powered Health Care Processes
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Invalidating Policies using Structural Information
Publication: Research - peer-review › Journal article – Annual report year: 2014

Model-based Abstraction of Data Provenance
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Modeling Human Behaviour with Higher Order Logic: Insider Threats
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Pareto Efficient Solutions of Attack Trees
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Proceedings 3rd Workshop on GRAPH Inspection and Traversal Engineering (GRAPHITE 2014)
Publication: Research - peer-review › Book – Annual report year: 2014

Proceedings of the 7th Interaction and Concurrency Experience (ICE 2014)
Publication: Research - peer-review › Book – Annual report year: 2014

Quantitative modelling and analysis of a Chinese smart grid: a stochastic model checking case study
Publication: Research - peer-review › Journal article – Annual report year: 2014

Smartphones as pocketable labs: Visions for mobile brain imaging and neurofeedback
Publication: Research - peer-review › Journal article – Annual report year: 2013

Sufficient Conditions for Vertical Composition of Security Protocols (Extended Version)
Publication: Research › Report – Annual report year: 2014

**The logic of XACML**
Publication: Research - peer-review › Journal article – Annual report year: 2014

**The stochastic quality calculus**
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

**Uniform Protection for Multi-exposed Targets**
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

**A calculus for quality**
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

**An algebraic approach to analysis of recursive and concurrent programs**
Publication: Research › Ph.D. thesis – Annual report year: 2013

**A tighter bound for the self-stabilization time in Herman's algorithm**
Feng, Y. & Zhang, L. 2013 In : Information Processing Letters. 113, 13, p. 486-488
Publication: Research - peer-review › Journal article – Annual report year: 2013

**Bisimulations meet PCTL equivalences for probabilistic automata**
Publication: Research - peer-review › Journal article – Annual report year: 2013

**Broadcast, Denial-of-Service, and Secure Communication**
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

**Deciding bisimilarities on distributions**
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

**Defining Privacy Is Supposed to Be Easy**
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013
Design-Efficiency in Security
Publication: Research › Report – 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

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

Externalizing Behaviour for Analysing System Models
Publication: Research - peer-review › Journal article – Annual report year: 2014

Foreword: Science of Computer Programming, special section from the Principles and Practice of Programming in Java conference
Publication: Research › Editorial – Annual report year: 2013

Invalidating Policies using Structural Information
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

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

Model checking conditional CSL for continuous-time Markov chains
Publication: Research - peer-review › Journal article – Annual report year: 2013

On Building Secure Communication Systems
Publication: Research › Ph.D. thesis – Annual report year: 2014

On the relationship between LTL normal forms and Büchi automata
Publication: Research - peer-review › Book chapter – Annual report year: 2013
Predictive access control for distributed computation
Publication: Research - peer-review › Journal article – Annual report year: 2013

Probabilistic Analysis of the Quality Calculus
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Reachability-based impact as a measure for insiderness
Publication: Research - peer-review › Journal article – Annual report year: 2014

Reachability for Finite-state Process Algebras Using Horn Clauses
Publication: Research - peer-review › Journal article – Annual report year: 2013

Revisiting Weak Simulation for Substochastic Markov Chains
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Safety versus Security in the Quality Calculus
Publication: Research - peer-review › Book chapter – Annual report year: 2013

Publication: Research › Book – Annual report year: 2013

Security Games for Cyber-Physical Systems
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Spatio temporal media components for neurofeedback
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

The Quest for Minimal Quotients for Probabilistic Automata
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

XACML 3.0 in Answer Set Programming
Logics and Models for Stochastic Analysis Beyond Markov Chains

Safety Verification for Probabilistic Hybrid Systems
Zhang, L., She, Z., Ratschan, S., Hermanns, H. & Hahn, E. M. 2012 In: European Journal of Control. 18, 6, p. 572-587

Smart Grid Security A Smart Meter-Centric Perspective

Activities:

CryptoForma Workshop
Almousa, O. (Speaker) 13 Jul 2015
Activity: Talks and presentations › Conference presentations

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

Prizes:

Otto Mønsteds Fund: Travel grant
Hugo-Andrés López-Acosta (Recipient), 25 Oct 2015
Prize: Prizes, scholarships, distinctions