Software Engineering - DTU Orbit (24/02/2018)

Software Engineering
Department of Applied Mathematics and Computer Science
Organisational unit: Section

Publications:

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

Blockchains for Business Process Management - Challenges and Opportunities
Publication: Research - peer-review › Journal article – Annual report year: 2018

Smart grid communication infrastructure comparison for distributed control of distributed energy resources using internet of things devices
Publication: Research - peer-review › Journal article – Annual report year: 2018

Time and activity sequence prediction of business process instances
Publication: Research - peer-review › Journal article – Annual report year: 2018

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

A Domain-Specific Language for Generic Interlocking Models and Their Properties
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

A Framework for Online Conformance Checking
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Algorithms and Tools for Petri Nets - Proceedings of the Workshop AWPN 2017
Publication: Research - peer-review › Report – Annual report year: 2017

Beyond Brainstorming: Exploring Convergence in Teams
Publication: Research - peer-review › Journal article – Annual report year: 2017

Cheetah Experimental Platform Web 1.0: Cleaning Pupillary Data
ePNK Applications and Annotations
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

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

Formal Development and Verification of Safe Railway Control Systems
Haxthausen, A. E. 2017
Publication: Research › Poster – Annual report year: 2017

Formal modelling and verification of interlocking systems featuring sequential release
Publication: Research - peer-review › Journal article – Annual report year: 2016

Lost in Time and Space: States of High Arousal Disrupt Implicit Acquisition of Spatial and Sequential Context Information
Publication: Research - peer-review › Journal article – Annual report year: 2017

Measuring and Explaining Cognitive Load During Design Activities: A fine-grained approach
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Model Checking Geographically Distributed Interlocking Systems Using UMC
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Online Conformance Checking for Petri Nets and Event Streams
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Smart grid communication comparison: Distributed control middleware and serialization comparison for the Internet of Things
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Smart Grid Communication Infrastructure Comparison
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Smart Grid Communication Middleware Comparison
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Smart Grid communication middleware comparison distributed control comparison for the Internet of Things
Defining Effectiveness Using Finite Sets: A Study on Computability
Publication: Research - peer-review › Conference article – Annual report year: 2016

Formal Development and Verification of Safe Railway Control Systems
Haxthausen, A. E. 2016
Publication: Research - peer-review › Poster – Annual report year: 2016

Gaussian elimination is not optimal, revisited
Publication: Research - peer-review › Journal article – Annual report year: 2016

How do humans inspect BPMN models: an exploratory study
Publication: Research - peer-review › Journal article – Annual report year: 2016

IT-Supported Formal Control: How Perceptual (in)Congruence Affects the Convergence of Crowd-Sourced Ideas
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Large-scale Optimization of Contoured Beam Reflectors and Reflectarrays
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Model Manipulation for End-User Modelers
Publication: Research › Ph.D. thesis – Annual report year: 2016

On the Feasibility of a Unified Modelling and Programming Paradigm
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

On the impact of size to the understanding of UML diagrams
Publication: Research - peer-review › Journal article – Annual report year: 2016

On the significance of the noise model for the performance of a linear MPC in closed-loop operation
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

On the Use of Static Checking in the Verification of Interlocking Systems
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Pragmatics annotated coloured petri nets for protocol software generation and verification
SaRDIn - A Safe Reconfigurable Distributed Interlocking
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

SaRDIn - A Safe Reconfigurable Distributed Interlocking
Publication: Research - peer-review › Poster – Annual report year: 2016

Studying the Creation of Design Artifacts
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

The impact of working memory and the "process of process modelling" on model quality: Investigating experienced versus inexperienced modellers
Publication: Research - peer-review › Journal article – Annual report year: 2016

The innovation element of the diploma (b.eng.) programs at DTU
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

VMTL: a language for end-user model transformation
Publication: Research - peer-review › Journal article – Annual report year: 2016

An institution for object-z with inheritance and polymorphism
Publication: Research - peer-review › Book chapter – Annual report year: 2015

Application and Theory of Petri Nets and Other Models of Concurrency: Special Issue of Selected Papers from Petri Nets 2014
Publication: Research - peer-review › Editorial – Annual report year: 2015

Behavior Modeling – Foundations and Applications: International Workshops, BM-FA 2009-2014, Revised Selected Papers
Publication: Research - peer-review › Book – Annual report year: 2015

Bx 2015 — Bidirectional Transformations: Proceedings of the 4th International Workshop on Bidirectional Transformations
Publication: Research - peer-review › Book – Annual report year: 2015

Capabilities for modelling of conversion processes in LCA
Publication: Research - peer-review › Conference abstract in proceedings – Annual report year: 2015
Publication: Research - peer-review › Book – Annual report year: 2015

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

The Event Coordination Notation: Behaviour Modelling Beyond Mickey Mouse
Publication: Research - peer-review › Book chapter – Annual report year: 2015

Towards Separation of Concerns in Flow-Based Programming
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Transparent Model Transformation: Turning Your Favourite Model Editor into a Transformation Tool
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

A SysML Test Model and Test Suite for the ETCS Ceiling Speed Monitor: Technical report, Work Package 4
Publication: Research › Report – Annual report year: 2014

A Domain-Specific Language for Railway Interlocking Systems
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

An environmental assessment system for environmental technologies
Clavreul, J., Baumeister, H., Christensen, T. H. & Damgaard, A. 2014 In : Environmental Modelling & Software. 60, p. 18-30
Publication: Research - peer-review › Journal article – Annual report year: 2014

An Evaluation of Automated Code Generation with the PetriCode Approach
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

An Index for Software Engineering Models
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

An Institution for Imperative RSL Specifications
Publication: Research - peer-review › Book chapter – Annual report year: 2014

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

Applied Bounded Model Checking for Interlocking System Designs
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Automated generation of formal safety conditions from railway interlocking tables
Publication: Research - peer-review › Journal article – Annual report year: 2014

Complete Model-Based Equivalence Class Testing for the ETCS Ceiling Speed Monitor
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Coordinating Interactions: The Event Coordination Notation
Publication: Research › Report – Annual report year: 2014

Design of a Domain-Specific Language for Material Flow Analysis using Microsoft DSL tools: An Experience Paper
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

EASETECH – A LCA model for assessment of environmental technologies
Publication: Research - peer-review › Conference abstract in proceedings – Annual report year: 2014

Efficient Representation of Timed UML 2 Interactions
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Electric vehicle integration in a real-time market
Publication: Research › Ph.D. thesis – Annual report year: 2015

FMI 2014 - Free Models Initiative: Workshop Proceedings
Publication: Research › Report – Annual report year: 2014

FM-RAIL-BOK organizers' message
Publication: Research - peer-review › Preface/postscript – Annual report year: 2014
Formal Modeling and Verification of Interlocking Systems Featuring Sequential Release
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Formal Verification of the Danish Railway Interlocking Systems
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

From Pen-and-Paper Sketches to Prototypes: The Advanced Interaction Design Environment
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Hypersonic: Model Analysis and Checking in the Cloud
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Hypersonic - Model Analysis as a Service
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Implementing the WebSocket Protocol Based on Formal Modelling and Automated Code Generation
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Modeling Requirements with RED
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

On the Impact of Diagram Layout: How Are Models Actually Read?
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

On the Impact of Layout Quality to Understanding UML Diagrams: Size Matters
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

PetriCode: A Tool for Template-Based Code Generation from CPN Models
Towards a CPN-Based Modelling Approach for Reconciling Verification and Implementation of Protocol Models
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Publication: Research › Report – Annual report year: 2013

Towards an Operationalization of the "Physics of Notations" for the Analysis of Visual Languages
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Utilizing a Flexibility Interface for Distributed Energy Resources Through a Cloud-Based Service
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

CO2NSL (Datalogger)
Andersen, S. S. & Gustafsson, F. 2012 Technical University of Denmark (DTU). 96 p.
Publication: Research - peer-review › Report – Annual report year: 2012

MQ-2 A Tool for Prolog-based Model Querying
Publication: Research - peer-review › Article in proceedings – 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

An Introduction to Formal Methods for the Development of Safety-critical Applications
Publication: Research › Report – Annual report year: 2010

Projects:

Effective, Co-created and compliant ACM
Weber, B., Burattin, A. & Abbad Andaloussi, A.
01/09/2017 → 31/08/2020
Project

COMPUTE Software Group
Störrle, H., Madsen, J., Ersbøll, B. K. & Kristensen, K.
01/01/2015 → 31/12/2015
Project

Communication with Models
Störrle, H. & Davidsen, J.
01/10/2014 → 30/09/2015
Project
PROActive INtegration of sustainable energy resources enabling active distribution networks
Petersen, B. S., Poulsen, B., Bindner, H. W. & You, S.
01/01/2014 → 31/12/2017
Project

Activities:

Formal Methods for Software Development
Haxthausen, A. E. (Guest lecturer)
11 Sep 2017 → 14 Sep 2017
Activity: Talks and presentations › Guest lectures, external teaching and course activities at other universities

International Workshop on Business Process Intelligence
Burattin, A. (Organizer)
10 Sep 2017 → 11 Sep 2017
Activity: Attending an event › Participating in or organising workshops, courses, seminars etc.

University of Florence
Haxthausen, A. E. (Visiting researcher)
15 Aug 2017 → 14 Sep 2017
Activity: Visiting an external institution › Visiting another research institution

Green Light for Smarter Methods in Railway Safety Verification
Haxthausen, A. E. (Guest lecturer)
31 May 2017
Activity: Talks and presentations › Conference presentations

International Workshop on Business Process Intelligence
Burattin, A. (Organizer)
19 Sep 2016
Activity: Attending an event › Participating in or organising workshops, courses, seminars etc.

Heidelberg Laureate Forum
Macedo, H. D. D. S. (Participant)
18 Sep 2016 → 23 Sep 2016
Activity: Attending an event › Participating in or organising a conference

Formel Modellering og Verifikation af Jernbanekontrolystsystemer: Et eksempel fra RobustRailS WP 4.1
Haxthausen, A. E. (Invited speaker)
3 Feb 2016
Activity: Talks and presentations › Conference presentations

International Workshop on Business Process Intelligence
Burattin, A. (Organizer)
31 Aug 2015
Activity: Attending an event › Participating in or organising workshops, courses, seminars etc.

Prizes:

Best Demo Award
Andrea Burattin (Recipient), 21 Sep 2016
Prize: Prizes, scholarships, distinctions
Best Process Mining Dissertation Award
Andrea Burattin (Recipient), 8 Sep 2014
Prize: Prizes, scholarships, distinctions

Press clippings:

Returning to the Rails.: Rail Safety: Back in the Spotlight.
Anne Elisabeth Haxthausen
18/03/2016
1 media contribution
Press / Media

Ekspert om tysk togkollision: "Besynderlig ulykke"
Anne Elisabeth Haxthausen
09/02/2016
1 media contribution
Press / Media

Matematik mindsker risiko for togkollision
Anne Elisabeth Haxthausen
01/12/2015
1 media contribution
Press / Media

Matematisk gennembrud øger tog sikkerheden
Anne Elisabeth Haxthausen
01/09/2015
1 media contribution
Press / Media