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

Clinical Processes - The Killer Application for Constraint-Based Process Interactions
Publication: Research - peer-review › Article in proceedings – 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

Streaming Process Discovery and Conformance Checking
Publication: Research - peer-review › Encyclopedia chapter – Annual report year: 2018

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

Time Prediction on Multi-perspective Declarative Business Processes
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
Agile Processes in Software Engineering and Extreme Programming
Publication: Research › Book – Annual report year: 2018

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

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

Cheetah Experimental Platform Web 1.0: Cleaning Pupillary Data
Publication: Research › Journal article – Annual report year: 2017

Compositional Model Checking of Interlocking Systems for Lines with Multiple Stations
Publication: Research › Conference article – Annual report year: 2017

Compositional Verification of Interlocking Systems for Large Stations
Publication: Research › Conference article – Annual report year: 2017

Convergence of Crowd-sourcing Ideas: A Cognitive Load perspective
Publication: Research › Conference article – Annual report year: 2017

Convergence on Self - Generated vs. Crowd-sourced Ideas in Crisis Response: Comparing Social Exchange Processes and Satisfaction with Process
Publication: Research › Conference article – Annual report year: 2017

Cost-effective evolution of research prototypes into end-user tools: The MACH case study
Publication: Research › Journal article – Annual report year: 2015

Designing Visual Decision Making Support with the Help of Eye-tracking
Publication: Research › Conference article – Annual report year: 2017

Digitalising the General Data Protection Regulation with Dynamic Condition Response Graphs
Domain Specific Language for Modeling Waste Management Systems
Publication: Research › Ph.D. thesis – Annual report year: 2017

Do we educate engineers that can engineer?
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Effect of Linked Rules on Business Process Model Understanding
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

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
Smart Grid Communication Infrastructure Comparison

Smart Grid Communication Middleware Comparison

Smart Grid Communication middleware comparison distributed control comparison for the internet of things

Smart Grid Serialization Comparison

Smart grid serialization comparison: Comparision of serialization for distributed control in the context of the Internet of Things

The Choice Is Yours: The Role of Cognitive Processes for IT-Supported Idea Selection

Visualization of the Evolution of Layout Metrics for Business Process Models

Algebraic Varieties and System Design

An approach for activity-based DEVS model specification

Clone Detection for Graph-Based Model Transformation Languages
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
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

SaRDIn - A Safe Reconfigurable Distributed Interlocking
Publication: Research - peer-review › Article in proceedings – 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

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
Bx 2015 — Bidirectional Transformations: Proceedings of the 4th International Workshop on Bidirectional Transformations

Capabilities for modelling of conversion processes in LCA

Capabilities For Modelling Of Conversion Processes In Life Cycle Assessment
Damgaard, A., Zarrin, B., Tonini, D., Baumeister, H. & Astrup, T. F. 2015

Code Generation from Pragmatics Annotated Coloured Petri Nets

Developing merged CDIO based curricula for diploma (B.Eng.) IT study programs at DTU

Effective and efficient model clone detection

Efficient Model Querying with VMQL

First International Workshop on Human Factors in Modeling (HuFaMo 2015): Preface

Formal Development and Verification of Railway Control Systems - In the context of ERTMS/ETCS Level 2

Formal Modeling and Verification of Interlocking Systems Featuring Sequential Release

Model Checking and Model-based Testing in the Railway Domain
Pragmatics Annotated Coloured Petri Nets for Protocol Software Generation and Verification
Publication: Research - peer-review » Book chapter – 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 › Article in proceedings – Annual report year: 2014

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

Publication: Research › Book – Annual report year: 2014

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

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

Complete Model-Based Equivalence Class Testing for the ETCS Ceiling Speed Monitor
Publication: Research › 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 › Article in proceedings – Annual report year: 2015

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

Efficient Representation of Timed UML 2 Interactions
Publication: Research › 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?
Applied Bounded Model Checking for Interlocking System Designs
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

A Rigorous Methodology for Analyzing and Designing Plug-Ins
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

A simulator for high-level Petri nets: An ePNK application
Kindler, E. & Laganeckas, M. 2013 In : Petri Net Newsletter. 82, p. 3–19
Publication: Research - peer-review › Journal article – Annual report year: 2013

Code Generation for Protocols from CPN models Annotated with Pragmatics
Publication: Research › Report – Annual report year: 2013

Compositional Synthesis of Controllers from Scenario-Based Assume-Guarantee Specifications
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Efficient Development and Verification of Safe Railway Control Software
Publication: Research - peer-review › Book chapter – Annual report year: 2013

Food Spoilage and Safety Predictor (FSSP) software
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Formal Development and Verification of Railway Control Systems
Vu Hong, L., Haxthausen, A. E. & Peleska, J. 2013
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2013

Formal Development and Verification of Safe Railway Control Systems
Haxthausen, A. E. & Vu Hong, L. 2013
Publication: Research - peer-review › Poster – Annual report year: 2013

Formal Model-Based Validation for Tally Systems
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Generating Protocol Software from CPN Models Annotated with Pragmatics
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013
How Do Developers Use APIs? A Case Study in Concurrency
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Improving modeling with layered UML diagrams
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Improving the Usability of OCL as an Ad-hoc Model Querying Language
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Improving the Usability of OCL as an Ad-hoc Model Querying Language
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Integrating Intelligent Electric Devices into Distributed Energy Resources in a Cloud-Based Environment
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Intelligent Electric Vehicle Integration - Domain Interfaces and Supporting Informatics
Publication: Research › Ph.D. thesis – Annual report year: 2013

LCA of waste management systems: Development of tools for modelling and uncertainty analysis
Publication: Research › Ph.D. thesis – Annual report year: 2013

Making sense to modelers: Presenting UML class model differences in prose
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

MOCCQL: A Declarative Language for Ad-Hoc Model Querying
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Modelling sensitivity and uncertainty in a LCA model for waste management systems - EASETECH
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

PetriCode: A Tool for Template-based Code Generation from CPN Models
Publication: Research › Report – Annual report year: 2013

Querying Business Process Models with VMQL
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Simulation Tool For Energy Consumption and Production: The development of a simulation tool for measuring the impact of a smart grid on a building
SmartNursing - a mobile application to improve communication in home care
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

The Overture Approach to VDM Language Evolution
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

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
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 Jernbanekontrolsystemer: 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