Alberto Lluch Lafuente - DTU Orbit (13/01/2018)

Lluch Lafuente, Alberto
albl@dtu.dk
Department of Applied Mathematics and Computer Science - Associate Professor

Formal Methods

Publications:

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: 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

Many-to-Many Information Flow Policies
(Lecture Notes in Computer Science, Vol. 10319).
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

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

Preface for the special issue on Interaction and Concurrency Experience 2015
Publication: Research - peer-review › Editorial – Annual report year: 2017

Preface: Special section on Graph Inspection and Traversal Engineering (GRAPHITE 2014)
Publication: Research › Editorial – Annual report year: 2017

Statistical Model Checking for Product Lines
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

A Fixpoint-Based Calculus for Graph-Shaped Computational Fields
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

AVOCLOUDY: a simulator of volunteer clouds
Sebastio, S., Amoretti, M. & Lluch Lafuente, A. 2015 In : Software: Practice & Experience. 46, 1, p. 3-30
Awareness and Control in Adaptable Transition Systems

A white box perspective on behavioural adaptation

Discretionary Information Flow Control for Interaction-Oriented Specifications

Klaim-DB: A Modeling Language for Distributed Database Applications

Preface
Lluch Lafuente, A. & Tuosto, E. 2015 In : Service Oriented Computing and Applications. 9, 3-4, p. 211 1 p.

Proceedings 11th International Workshop on Automated Specification and Verification of Web Systems

Proceedings 8th Interaction and Concurrency Experience

Quantitative Analysis of Probabilistic Models of Software Product Lines with Statistical Model Checking

Reconciling White-Box and Black-Box Perspectives on Behavioral Self-adaptation

Replica-Based High-Performance Tuple Space Computing
Replicating Data for Better Performances in X10
Publication: Research - peer-review › Book chapter – Annual report year: 2016

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

The SCEL Language: Design, Implementation, Verification
Publication: Research - peer-review › Book chapter – Annual report year: 2015

Tools for Ensemble Design and Runtime
Publication: Research - peer-review › Book chapter – Annual report year: 2015

A computational field framework for collaborative task execution in volunteer clouds
Publication: Research - peer-review › Conference abstract in proceedings – Annual report year: 2014

Can We Efficiently Check Concurrent Programs Under Relaxed Memory Models in Maude?
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Modelling and analyzing adaptive self-assembly strategies with Maude
Publication: Research - peer-review › Journal article – 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

Proceedings of the 8th Symposium on Trustworthy Global Computing (TGC 2013)
Publication: Research - peer-review › Book – Annual report year: 2014

Programming and Verifying Component Ensembles
Modelling and analyzing adaptive self-assembling strategies with Maude

On structured model-driven transformations

State Space c-Reductions of Concurrent Systems in Rewriting Logic

A formal support to business and architectural design for service-oriented systems

A Lewisian approach to the verification of adaptive systems

Hierarchical models for service-oriented systems

Internet e Web 2.0
Lluch Lafuente, A. 2011

Towards a Maude Tool for Model Checking Temporal Graph Properties

A formalisation of Adaptable Pervasive Flows

An Algebra of Hierarchical Graphs
An algebra of hierarchical graphs and its application to structural encoding
Publication: Research - peer-review › Journal article – Annual report year: 2010

Counterpart semantics for a secondorder mu-calculus
Publication: Research - peer-review › Article in proceedings – Annual report year: 2010

Exploiting the hierarchical structure of rule-based specifications for decision planning
Publication: Research - peer-review › Article in proceedings – Annual report year: 2010

Rewriting nested graphs, through term graphs
Publication: Research - peer-review › Article in proceedings – Annual report year: 2010

A service-oriented UML profile with formal support
Publication: Research - peer-review › Article in proceedings – Annual report year: 2009

Hierarchical Design Rewriting with Maude
Publication: Research - peer-review › Book chapter – Annual report year: 2009

On Symbolic Semantics for Namedecorated Contexts
Publication: Research - peer-review › Conference article – Annual report year: 2009

Partial-order reduction for general state exploring algorithms
Publication: Research - peer-review › Journal article – Annual report year: 2009

Specification and Analysis with Hierarchical Graphs
Publication: Research - peer-review › Book chapter – Annual report year: 2009

Ten virtues of structured graphs
Publication: Research - peer-review › Article in proceedings – Annual report year: 2009

Architectural Design Rewriting as an Architecture Description Language
Publication: Research - peer-review › Article in proceedings – Annual report year: 2008
Graph-Based Design and Analysis of Dynamic Software Architectures
Publication: Research - peer-review › Book chapter – Annual report year: 2008

On GS-Monoidal Theories for Graphs with Nesting
Publication: Research - peer-review › Book chapter – Annual report year: 2008

Service Oriented Architectural Design
Publication: Research - peer-review › Article in proceedings – Annual report year: 2008

Style-Based Architectural Reconfigurations
Publication: Research - peer-review › Journal article – Annual report year: 2008

A Temporal Graph Logic for Abstractions of Graph Rewriting Systems
Publication: Research - peer-review › Article in proceedings – Annual report year: 2007

Graphical Encoding of a Spatial Logic for the pi-calculus
Publication: Research - peer-review › Article in proceedings – Annual report year: 2007

Towards Model Checking Spatial Properties with SPIN
Publication: Research - peer-review › Article in proceedings – Annual report year: 2007

A Logic for Application Level QoS
Publication: Research - peer-review › Conference article – Annual report year: 2006

A logic for graphs with QoS
Publication: Research - peer-review › Conference article – Annual report year: 2006

Heuristic Search for the Analysis of Graph Transition Systems
Publication: Research - peer-review › Article in proceedings – Annual report year: 2006
Partial-Order Reduction for General State Exploring Algorithms
Publication: Research - peer-review › Article in proceedings – Annual report year: 2006

Action Planning for Graph Transition Systems
Publication: Research - peer-review › Article in proceedings – Annual report year: 2005

Cost-Algebraic Heuristic Search
Publication: Research - peer-review › Article in proceedings – Annual report year: 2005

Graphical encoding of a spatial logic for the pi-calculus
Publication: Research - peer-review › Conference article – Annual report year: 2005

Quantitative mu-calculus and CTL defined over constraint semirings
Publication: Research - peer-review › Journal article – Annual report year: 2005

Quantitative μ-calculus and CTL Based on Constraint Semirings
Publication: Research - peer-review › Conference article – Annual report year: 2005

Using Linear Temporal Logic for Goal-Oriented Policy Refinement Frameworks
Publication: Research - peer-review › Article in proceedings – Annual report year: 2005

Abstraction in Directed Model Checking
Publication: Research › Article in proceedings – Annual report year: 2004

Directed explicit-state model checking in the validation of communication protocols
Publication: Research - peer-review › Journal article – Annual report year: 2004

Partial-order reduction and trail improvement in directed model checking
Publication: Research - peer-review › Journal article – Annual report year: 2004

Symmetry Reduction and Heuristic Search for Error Detection in Model Checking
Publication: Research - peer-review › Article in proceedings – Annual report year: 2003

Partial Order Reduction in Directed Model Checking
Directed Explicit Model Checking with HSF-SPIN

Protocol Verification with Heuristic Search

Trail-Directed Model Checking

Projects:

Formal methods for Secure Trust Infrastructures
Birkedal, R., Mödersheim, S. A. & Lluch Lafuente, A.
01/12/2016 → …
Project: PhD

LIGHTTest foundation
Bjerregaard, M. O., Mödersheim, S. A. & Lluch Lafuente, A.
01/09/2016 → 06/09/2016
Project: PhD

Cognitive and Perceptive Cameras - Compilation system
Jensen, N. B., Probst, C. W., Karlsson, S., Lluch Lafuente, A., Kessler, C. W. & Sestoft, P.
01/10/2013 → 18/01/2017
Project: PhD

Stochastic Model Checking of Socio-Technical Models
01/07/2013 → 23/11/2016
Project: PhD

Modelling Socio-Technical Aspects of Organizational Security
Ivanova, M. G., Probst, C. W., Lluch Lafuente, A., Gollmann, D. & Schürmann, C.
15/01/2013 → 20/04/2016
Project: PhD

Modeling and Verifying eID Protocols (Future ID)
15/12/2012 → 24/02/2016
Project: PhD

Portable and Predictable Performance Heterogeneous Embedded Manycores - Upper Level System stack
01/10/2012 → 21/01/2016
Project: PhD
Cyber-Physical Systems secure communication protocols
01/12/2011 → 04/03/2015
Project: PhD