

# Mikkel Larsen Pedersen

Full name: Mr. Mikkel Larsen Pedersen  
Title: PhD, M.Sc.  
Date of birth: 15th of January 1984  
Citizenship: Danish  
Marital status: Married, two children

## *Contact information*

Aalborg University  
Department of Computer Science  
Selma Lagerlöfs Vej 300, room 1.2.50  
9220 Aalborg Øst

Phone: (+45) 9940 9857  
Fax: (+45) 9940 9798  
Email: [mikkelp@cs.aau.dk](mailto:mikkelp@cs.aau.dk)  
Homepage: <http://www.cs.aau.dk/~mikkelp>

## Education

### *Ph.D. at Department of Computer Science, Aalborg University*

*Title:* Specification Theories for Probabilistic Systems

*Supervisor:* Prof. Kim Guldstrand Larsen

*Period:* Sep 2008 – Dec 2011

Funded by MT-Lab, a VKR centre of Excellence

*External stay:* INRIA/IRISA, Rennes, France (host: Axel Legay) February – May 2011

### *M.Sc. in Mathematics at Department of Mathematics, Aalborg University*

*Thesis title:* Ramsey Theory for Graphs (co-author: Anders Lindberg Juel)

*Supervisor:* Associate prof. Leif Kjær Jørgensen

*Minor:* Computer Science (3 semesters)

*Period:* Sep 2003 – Jun 2008

## Employment

### *Department of Computer Science, Aalborg University*

Postdoctoral researcher, Nov 2011–

Working under Radu Mardare (Modular Markovian Logics for Analysis of Stochastic Concurrent Systems, Sapere Aude), see <http://people.cs.aau.dk/~mardare/projects.htm>

### *Department of Computer Science, Aalborg University*

Ph.D. fellow, 2008 - 2011

Funded by MT-Lab, a VKR centre of Excellence

## Research

### Conference publications

- B. Delahaye, K. G. Larsen, A. Legay, M. L. Pedersen, and A. Wasowski (2011)  
Title: *APAC: a tool for reasoning about Abstract Probabilistic Automata*  
Accepted at 8th Int. Conf. on Quantitative Evaluation of SysTems (QEST)  
*To appear*
- B. Delahaye, J. P. Katoen, K. G. Larsen, A. Legay, M. L. Pedersen, F. Sher, and A. Wasowski (2011)  
Title: *New Results on Abstract Probabilistic Automata*  
Accepted at 11th Int. Conf. on Application of Concurrency to System Design (ACSD)  
*Published*
- B. Delahaye, K. G. Larsen, A. Legay, M. L. Pedersen, and A. Wasowski (2011)  
Title: *Decision Problems for Interval Markov Chains*  
Accepted at 5th Int. Conf. on Language and Automata Theory and Applications (LATA)  
*Published*
- B. Delahaye, J. P. Katoen, K. G. Larsen, A. Legay, M. L. Pedersen, F. Sher, and A. Wasowski (2011)  
Title: *Abstract Probabilistic Automata*  
Accepted at 12th Int. Conf. on Verification, Model Checking, and Abstract Interpretation (VMCAI)  
*Published*
- B. Caillaud, B. Delahaye, K. G. Larsen, A. Legay, M. L. Pedersen, and A. Wasowski (2010)  
Title: *Compositional Design Methodology with Constraint Markov Chains*  
Accepted at 7th Int. Conf. on Quantitative Evaluation of SysTems (QEST)  
*Published*

### Journal publications

- B. Delahaye, K. G. Larsen, A. Legay, M. L. Pedersen, and A. Wasowski (2011)  
Title: *New Results for Constraint Markov Chains*  
Accepted in Performance Evaluation (PEVA)  
*Accepted*
- B. Delahaye, K. G. Larsen, A. Legay, M. L. Pedersen, and A. Wasowski (2011)  
Title: *Consistency and Refinement for Interval Markov Chains*  
Accepted in Journal of Logic and Algebraic Programming (JLAP)  
*Accepted*
- B. Caillaud, B. Delahaye, K. G. Larsen, A. Legay, M. L. Pedersen, and A. Wasowski (2010)  
Title: *Constraint Markov Chains*  
Accepted in Theoretical Computer Science (TCS)  
*Published*

### Workshop contributions

- B. Delahaye, K. G. Larsen, A. Legay, M. L. Pedersen, and A. Wasowski (2011)  
Title: *Stuttering in Abstract Probabilistic Automata*  
Extended abstract accepted at Nordic Workshop on Programming Theory (NWPT)
- B. Delahaye, K. G. Larsen, A. Legay, M. L. Pedersen, and A. Wasowski (2010)  
Title: *Decision Problems for Interval Markov Chains*  
Extended abstract accepted at Nordic Workshop on Programming Theory (NWPT)

## Software

APAC

<http://www.cs.aau.dk/~mikkelp/apac>

## Conference and Seminar Presentations

Talk: New Results on Abstract Probabilistic Automata

11th Int. Conf. on Application of Concurrency to System Design (ACSD), Newcastle, United Kingdom, 20-24 June 2011

Talk: Abstract Probabilistic Automata

12th Int. Conf. on Verification, Model Checking, and Abstract Interpretation (VMCAI), Austin, Texas, 23-25 January 2011

Talk: Decision Problems for Interval Markov Chains

NWPT 2010, Åbo Akademi University, Turku, Finland, 10-12 November 2010

Talk: Decision Problems for Interval Markov Chains

MT-LAB workshop, Technical University of Denmark, Copenhagen, 18 June 2010

Talk: Compositional Design Methodology with Constraint Markov Chains

Quantitative Models : Expressiveness and Analysis, Schloss Dagstuhl

Talk: Constraint Markov Chains: A Compositional Specification Theory for Probabilistic Systems

MT-LAB workshop, Technical University of Denmark, Copenhagen, 17 August 2009

Talk: Supervisory Control vs. Game Automata

GASICS meeting, Université Libre de Bruxelles, 5-6 March 2009

## Scientific services

Sporadic reviewer for

Conferences: TACAS ('09, '10), FORMATS ('09), QEST ('09, '10), CONCUR ('10), HSCC ('10), SOFSEM ('11), CAV ('11), FSTTCS ('11)

Journals: Formal Methods in System Design ('10)

## Teaching (during PhD)

Lecturing:

Course: MATLAB

Aalborg University, first year, 2010, approx. 110 students

Aalborg University, first year, 2009, approx. 90 students

Teaching assistance:

Test and Verification, 10th semester course

Software and Verification, 6th semester course

Syntax and Semantics, 4th semester course

Group supervision:

Software engineers (1 group, 6 students), 6th semester

Software systems engineers (international master education) (2 groups, 6 students), 8th semester

First year student in computer science/software engineering (3 groups, 21 students), 1st-2nd semester

## Other

Marktoberdorf summer school, 3–14 August 2010

External stay at INRIA/IRISA, Rennes, France, 1st February - 1st May 2011 (host: Axel Legay)

Last updated: December 17, 2011