

Personal Information

Ulrik Mathias Nyman
Doravej 45 st. th.
9000 Aalborg
Born: 1978-12-02

Married to Tina, Father of Mads (2005) and Ida Mai (2008)

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Education

2008 Received a Ph.d. degree in computer science from Aalborg University.

2004 – 2007 Ph.d. student at Aalborg University affiliated with CISS
(Center for Indlejrede Software Systemer)
(Center for Embedded Software Systems)

1998 – 2003 Master of Computer Science at Aalborg University (cand.scient.dat.)

Employment

2022 – Head of Studies at the Department of Computer Science, Aalborg University.
Deputy Head of Department and part of the department management group.

2020 – 2022 Deputy Head of Studies at the Department of Computer Science.
Part of the department management group.

2012 – Associate Professor at the Department of Computer Science, Aalborg University

2009 – 2012 Assistant Professor at the Department of Computer Science, Aalborg University

2007 – 2009 Scientific Assistant at the Department of Computer Science, Aalborg University

Other scientific qualifications

Journal reviews for:

Theoretical Computer Science, Software Tools for Technology Transfer,
Software: Practice and Experience.

Program committee:

Member of the Technical Program Committee for DS-RT'22

https://www.aconf.org/conf_181993.html

Research management

MULTI-CORE SAFETY:

Compositional Verification of Real-time MULTI-CORE SAFETY Critical Systems, PI for the project granted by the Danish Council for Independent Research DFF. Budget: 1.8 mill. DKK.

RECOMP:

EU Artemis project. Responsible for coordinating deliverables.

CRAFTERS:

EU Artemis project. Coordination of small research team and in charge of deliverables.

ITOS:

Danish National Confederation of Industries project. Extensive communication with involved companies.

Workshop Organization

Copenhagen Meeting on Modal Transition Systems

Held September 20th, 2007 at ITU Copenhagen. Organizer.

FIT2008

Foundations of Interface Technologies 2008, Held April 5th 2008 at ETAPS 2008 in Budapest. Organizer.

AiSoS2013

First workshop on Advances in Systems of Systems. Held March 16th 2013 at ETAPS 2013 in Rome. PC Chair.

Scientific focus areas

My research interests include Interface Theories, Model Checking, Compositional Verification, Software Verification, Model Based Schedulability Analysis, Model Predictive Control and Distributed Route Planning.

PhD. supervision

Supervision of the following PhD. projects:

- 2018 – Martin Kristjansen. Main supervisor with Brian Nielsen as co-supervisor. PhD project on model based schedulability analysis and mobile robot route planning.
- 2019 – Andrej Kiviriga. Co-supervisor with Kim G. Larsen as main supervisor. PhD project on randomised methods for model checking.

International relations

Prof. Pawel Szcześniak and Assistant Prof. Iwona Grobelna, Institute of Automation, Electronics and Electrical Engineering, University of Zielona Góra, Poland.

Ongoing collaboration on applying Statistical Model Checking to Model Predictive Control. This collaboration also involves Professor Frede Blaabjerg and Post Doc Mataja Novak from Department of Energy at Aalborg University.

<http://ulrik.blog.aau.dk/model-predictive-control/>

Prof. Insup Lee, Associate Prof. Linh Thi Xuan Phan and Research Prof. Oleg Sokolsky from Computer and Information Science Dept., University of Pennsylvania, USA.

Long term collaboration on applying model based analysis techniques to the schedulability domain. <http://ulrik.blog.aau.dk/schedulability/> & <http://ulrik.blog.aau.dk/multi-core-safety/>

Programming Experience

Languages: Java, C, C++, Learning Rust

Other: Model Checking, Timed Automata, Uppaal, SPIN, visualSTATE, Coloured Petri Net, DesignCPN.

Language Skills

Danish as mother tongue. English fluently (written and verbal). Swedish, good verbal skills.