Nils Müllner

Curriculum vitæ

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Personal Details

Full name	DrIng. Nils Henning Müllner
\mathbf{Sex}	male
Date	July 1, 2018
Date and place of birth	November 19, 1979, Bremen, Germany
Citizenship	German
Current Residence	Föreningsgatan 18a, 72218 Västerås, Sweden

Education

- February 26, Promotion Ingenieurswissenschaften (PhD equiv.), Carl von Ossietzky Univer 2014 sität Oldenburg, Germany, Doctoral Thesis: Unmasking fault tolerance Quantifying deterministic recovery dynamics in probabilistic environments, Supervisors: Prof. Dr. Ing. Oliver Theel, Prof. Dr. Ir. Dr. h.c. Joost-Pieter Katoen.
 - April 10, Diplom Informatik (MSc equiv.), Carl von Ossietzky Universität Oldenburg, Germany,
 2007 Diploma thesis: Simulation of self-stabilizing distributed algorithms to determine fault tolerance measures.
- 22.08.1990 School, Ökumenisches Gymnasium, Bremen, Germany, advanced courses: Physics, 23.06.1999 Chemistry.

Language Skills

German Native Speaker

EnglishExcellentfirst foreign language in school, PhD studies in English, Cambridge First CertificateSwedishFluentpassed SFI-B,C,D, currently studying Swedish as Second Language (SAS)LatinBasicssecond foreign language in schoolSpanishBasicsthird foreign language in school

Current Position

- 01.10.2016 **Forskarassistent, Use Case Leader**, (until September 2017 as Postdoktor), Mälardalen 30.04.2019 Högskola Eskilstuna Västerås, Division of Embedded Systems, Software Testing Laboratory, SafeCop (Safe Cooperating Cyber-Physical Systems using Wireless Communication), supervisor: Prof. Dr. Hans Hansson.
- 01.11.2015 Forskarassistent, (until September 2017 as Postdoktor), Mälardalens Högskola Eskil-31.08.2018 stuna Västerås, Division of Embedded Systems, Software Testing Laboratory, TOCSYC (Testing of Critical System Characteristics), supervisors: Prof. Dr. Paul Pettersson, Prof. Dr. Björn Lisper, Prof. Dr. Daniel Sundmark.

Previous Work Experience

- 31.08.2013 wissenschaftlicher Mitarbeiter, Carl von Ossietzky Universität Oldenburg, Depart 31.10.2015 ment of Computer Science, Oldenburg, CSE (Interdisciplinary Research Center on Critical Systems Engineering for Socio-Technical Systems), supervisors: Prof. Dr. Martin Fränzle, PD Dr. Sibylle Fröschle.
- 15.04.2011 wissenschaftlicher Mitarbeiter, OFFIS Institute for Computer Science, Oldenburg,
 30.09.2013 MoVeS: Modeling, Verification, and control of complex Systems, funded by the European Commission, ICT Research in FP7-ICT-2009-257005, supervisor: Prof. Dr. Martin Fränzle.
- 01.04.2008 **Stipendiary**, Carl von Ossietzky Universität Oldenburg, Oldenburg, TrustSoft (Graduate 31.03.2011 College on trustworthy Software Systems), funded by the German Research Foundation (DFG), supervisor: Prof. Dr.-Ing. Oliver Theel.
- 16.04.2007 wissenschaftlicher Mitarbeiter, Carl von Ossietzky Universität Oldenburg, Oldenburg,
 31.03.2008 Trans-regional Collaborative Research Center AVACS (Automatic Verification and Analysis of Complex Systems), funded by the German Research Foundation (DFG), supervisor: Prof. Dr.-Ing. Oliver Theel.
- 01.04.2002 **studentische Hilfskraft**, Berufsakademie (University of Cooperative Education), 31.03.2003 Oldenburg.
- 01.08.1999 Military duty, List, Sylt, Germany and Tarp, Schleswig Holstein, Germany, combat 30.09.2000 medic at the German Navy, final rank: Hauptgefreiter.

Supervision

- 2018 Ali Alexander Mokdad, Master thesis, Naiad PID Controller, Mälardalens Högskola
- 2018 Erik Martín Campaña, Master thesis, Brake-by-wire in SUMO: A Custom Solution For Braking Simulation, Mälardalens Högskola
- 2016 Christian Åberg, Bachelor thesis, Automated Deployment of Customer-Premises Equipment, Mälardalens Högskola
- 2011 Nils de Buhr, Diplomarbeit, Aufbau eines Rechner-Clusters, Universität Oldenburg

Teaching

- DVA408 2015/2016, 2016/2017, 2017/2018, Project in Embedded Systems, 7.5 ECTS, MSc level
- DVA234 2016, 2017, 2018, Databases, 7.5 ECTS, BSc level

Honors

AINA 2012 Best Paper Award at one of the most prominent conferences on self-stabilization, first author of the best of 361 publications, acceptance rate on the main track: <29%

- Full Stipend TrustSoft Graduate College, 2008–2011, awarded by the German Research Foundation (DFG)
- Distinguished Bachelor equivalent of former Diplom graded with distinction for achieving $\geq 95\%$, BSc eq. supervisors Dr. habil. Elke Wilkeit and Dr. Hans Fleischhack for the thesis Comparison of Logical-Functional Languages (in German language)

Academic Services

- VTC2018 IEEE Vehicular Technology Conference 2018
 ISC2 2016 IEEE International Smart Cities Conference
 SETTA2016 Symposium on Dependable Software: Theories, Tools and Applications
 AnSS2016 Spring Simulation Multi-Conference
 CECNet2014 The 4th International Conference on Electronics, Communications and Networks
 SEFM2014 The 12th International Conference on Software Engineering and Formal Methods
 FGCS Future Generation Computer Systems, Springer Journal
 DPNoS 2014 The 2014 International Workshop on the Design and Performance of Networks on Chip
 ICEPIT The 2014 International Conference on Electronic Publishing and Information Technology
 IJCDS V3 International Journal of Computing and Digital Systems
 CSS2013 The 5th International Symposium on Cyberspace Safety and Security
 ADC2013 The 24th Australasian Database Conference
 EMSOFT2012 The 12th International Conference on Embedded Software
 SEFM2012 The 10th International Conference on Software Engineering and Formal Methods
 ICDKE2012 2012 International Conference on Data and Knowledge Engineering
- ICDKE2011 2011 International Conference on Data and Knowledge Engineering
- ARES2010 The 5th International Conference on Availability, Reliability and Security

Publications

Ten selected publications out of 16, ordered by impact factor (http://www.mue-tech.com/work.html):

- JCSS 79-7 Nils Müllner, Oliver Theel, and Martin Fränzle. Combining Decomposition and Reduction for the State Space Analysis of Self-Stabilizing Systems. In Journal of Computer and System Sciences (JCSS), volume 79, 7, pages 1113 – 1125. Elsevier Science Publishers B. V., 2013.
- IREP2013 Maryam Kamgarpour, Christian Ellen, Sadegh Esmaeil Zadeh Soudjani, Sebastian Gerwinn, Johanna Mathieu, Nils Müllner, Alessandro Abate, Duncan Callaway, Martin Fränzle, and John Lygeros. Modeling Options for Demand Side Participation of Thermostatically Controlled Loads. In Proceedings of the Bulk Power System Dynamics and Control - IX Optimization, Security and Control of the Emerging Power Grid (IREP2013), pages 1 – 15. IEEE Computer Society Press, Crete, Greece, August 2013.
- WAINA 2014 Nils Müllner, Oliver Theel, and Martin Fränzle. Composing Thermostatically Controlled Loads to Determine the Reliability against Blackouts. In Proceedings of the 28th IEEE International Conference on Advanced Information Networking and Applications Workshops (WAINA2014), pages 334–341. IEEE Computer Society Press, Victoria, BC, Canada, May 2014.
 - AINA 2014 Nils Müllner, Oliver Theel, and Martin Fränzle. Combining Decomposition and Lumping to Evaluate Semi-hierarchical Systems. In Proceedings of the 28th IEEE International Conference on Advanced Information Networking and Applications (AINA2014), pages 1049 – 1056. IEEE Computer Society Press, Victoria, BC, Canada, May 2014.

- UFirst 2009 Nils Müllner, Abhishek Dhama, and Oliver Theel. Deriving a Good Tradeoff Between System Availability and Time Redundancy. In Proceedings of the Symposia and Workshops on Ubiquitous, Automatic and Trusted Computing, number E3737 in Track "International Symposium on UbiCom Frontiers - Innovative Research, Systems and Technologies (Ufirst-09)", pages 61 – 67. IEEE Computer Society Press, Brisbane, QLD, Australia, July 2009
- AnSS 2008 Nils Müllner, Abhishek Dhama, and Oliver Theel. Derivation of Fault Tolerance Measures of Self-Stabilizing Algorithms by Simulation. In *Proceedings of the 41st Annual Symposium* on Simulation (AnSS2008), pages 183 – 192. IEEE Computer Society Press, Ottawa, ON, Canada, April 2008
- ITEQS 2017 Nils Müllner, Saifullah Khan, Md Habibur Rahman, Wasif Afzal, Mehrdad Saadatmand. Simulation-Based Safety Testing Brake-By-Wire. In Proceedings of the International Workshop on Testing Extra-Functional Properties and Quality Characteristics of Software Systems (ITEQS2017), submitted for publication. IEEE Computer Society Press, Tokyo, Japan, March 2017.
- WAINA 2011 Nils Müllner and Oliver Theel. The Degree of Masking Fault Tolerance vs. Temporal Redundancy. In Proceedings of the 25th IEEE International Conference on Advanced Information Networking and Applications Workshops (WAINA2011), pages 21 – 28. IEEE Computer Society Press, Biopolis, Singapore, March 2011
 - CEE 2018 Saifullah Khan, Muhammad Alam, Martin Fränzle, Nils Müllner. A Traffic Aware Segmentbased Routing protocol for VANETs in urban scenarios. In *Computers & Electrical Engineering.* Elsevier, 2018.
 - ATC 2018 Tam Ninh, Hung Tran, Nils Müllner. Probabilistic Communication in Car Platoons. Submitted to the 2018 International Conference on Advanced Technologies for Communications (ATC18). IEEE Computer Society Press, 2018.

Västerås, Sweden, July 1, 2018

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