

# Curriculum Vitae

**Prof. Dr. rer. nat. habil. Malte Lochau**

## Professional Experience

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| Since 04/20   | Full Professor (W3)<br>Chair for Model-based Engineering<br>University of Siegen   |
| 10/19 – 03/20 | Temporary Professor (W3 Vertretungsprofessur)<br>Chair for Practical Computer Science<br>University of Siegen                                      |
| 10/18 – 03/19 | Temporary Professor (W3 Vertretungsprofessur)<br>Chair for Software Languages<br>University of Koblenz-Landau                                      |
| 04/18 – 06/18 | Sabbatical at Dipartimento di Informatica, University of Pisa<br>(Visiting Prof. Andrea Corradini)   |
| 04/17 – 09/17 | Temporary Professor (W3 Vertretungsprofessur)<br>Chair for Software Engineering<br>University of Passau  |
| since 01/13   | Postdoctoral Researcher<br>Real-Time Systems Lab (FG Echtzeitsysteme)<br>TU Darmstadt, Germany<br>Group Leader “Software Product Line Engineering” |
| 10/12 - 12/12 | Researcher<br>Real-Time Systems Lab (FG Echtzeitsysteme)<br>TU Darmstadt, Germany  |
| 03/07 - 10/12 | Researcher / Ph.D. Student<br>Institute for Programming and Reactive Systems<br>TU Braunschweig, Germany   |
| 02/06 – 07/06 | Student Assistant<br>Institute for Programming and Reactive Systems<br>TU Braunschweig, Germany  |
| 10/05 – 02/06 | Internship<br>Gesis / Salzgitter AG  |
| 10/04 – 02/05 | Student Assistant<br>Institute for Database Systems<br>TU Braunschweig   |

## Scientific Education

- 11/17 PD in Software Engineering, TU Darmstadt  
Habilitation Thesis: *“Model-based Quality Assurance of Cyber-Physical Systems with Variability in Space, over Time, and at Runtime”*  
Referees: Prof. Gunter Saake (OVGU Magdeburg), Prof. Bernhard Westfechtel (Universität Bayreuth), Prof. Mohammad Reza Mousavi (Leicester University)
- 03/07 – 10/12 Ph.D. Student in Computer Science, TU Braunschweig  
Degree: Ph.D. (Dr. rer. nat.), Grade: “summa cum laude”  
Dissertation: *“Model-Based Conformance Testing of Software Product Lines”*  
Supervisor: Prof. Ursula Goltz (Braunschweig)  
External Advisor: Prof. Andy Schürr (TU Darmstadt)
- 10/01 - 02/07 Studies in Computer Science, TU Braunschweig  
Degree: Diplom-Informatiker (Dipl.-Inform.)

## Project Experience

TU Darmstadt (since 2012)

- Principal Investigator (PI) of 2nd Funding Phase of DFG Priority Programme (SPP) 1593: Design for Future – Managed Software Evolution  
Part Project: Integrated Model-based Testing of Continuously Evolving Software Product Lines 2 (IMoTEP 2) – 2016 – 2019.
- Associated Member of LOEWE-Schwerpunkt Software-Factory 4.0 (SF 4.0)  
Part Project D: Platform Adaptation – since 2018
- Associated Member of DFG-funded Project “Behavioral Equivalences: Environmental Aspects, Metrics and Generic Algorithms” (Prof. B. König, Univ. Duisburg-Essen) – since 2018
- Associated Member of 2nd Funding Phase of DFG Collaborative Research Centre (SFB) 1053: Multi-Mechanisms for the Future Internet (MAKI)  
Part Project A01: Self-Adaption - Adaptable System Architecture for Proactive Communication Systems – since 2017
- Associated Member of 1st Funding Phase of DFG Priority Programme (SPP) 1593: Design for Future – Managed Software Evolution  
Part Project: Integrated Model-based Testing of Continuously Evolving Software Product Lines (IMoTEP), 2013 – 2015
- Associated Member of 1st Funding Phase of DFG Collaborative Research Center (SFB) 1053: Multi-Mechanisms for the Future Internet (MAKI)  
Part Project B01: Monitoring and Analysis – 2013 - 2016
- Associated Member of Industrial Project, funded by VW/TRW: Automatic Detection of Weighting Factors for In-ports based on Static C-code Analysis, 2014 – 2015

TU Braunschweig (Project Contributions as Ph.D. Student, 2007 - 2012)

- DFG Collaborative Research Center (SFB) 562: Roboter für Handhabung und Montage  
Part Project A5: Software Engineering and Formal Analysis
- DFG funded Project: Synchronous and Asynchronous Interactions in Distributed Systems

(SAS)

- BMBF funded Project: Model-based Development and Quality Assurance of Thermodynamic Systems (TEMO)
- GAL (Niedersächsischer Forschungsverbund Gestaltung altersgerechter Lebenswelten)
- Industrial Project, funded by VW: Architecture Evaluation (Archival)
- Industrial Project, funded by VW: Optimization of Engine Control Units using Genetic Algorithms (OMgA)

## Ph.D. Students

University of Siegen

- Julian Schlechtriemen: Probabilistic Freespace Prediction in Structured Traffic Environments for Trajectory Planning (University of Siegen, Committee Member)
- Michael C. Schmidt: *Fault-Tolerant Real-Time Architecture for Elderly Care* (University of Siegen, Committee Chair)
- Daniel Onwuchekwa: *Fault Injection Framework for Time-Triggered Systems* (University of Siegen, Committee Member)
- Christian Reich: *Learning Machine Monitoring Models from Sparse and Noisy Sensor Data Annotations* (University of Siegen, Committee Member)

TU Darmstadt

- Lars Luthmann (TU Darmstadt, Second Referee)
- Géza Kulcsár (TU Darmstadt, Co-Supervision)
- Markus Weckesser (TU Darmstadt, Co-Supervision)
- Johannes Bürdek (TU Darmstadt, Co-Supervision)
- Hauke Baller (TU Braunschweig, Co-Supervision)
- Karsten Saller (TU Darmstadt, Co-Supervision)