

# Curriculum Vitae

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

## Professional Experience

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

## 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

- Christina Nicolau: *Intelligente, sensorbasierte Zustandsüberwachung von Trafostationen* (University of Siegen, Committee Chair)
- Imanol Allende: Statistical Path Coverage for Non-Deterministic Complex Safety-Related Software Testing (University of Siegen, Committee Member)
- 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

- Sebastian Ruland (TU Darmstadt, Second Referee)
- 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)

### Others

- Sven Peldszus (University of Koblenz-Landau, Second Referee)