# DI DR. TECH. KRISTOF M. MEIXNER, BSC



**I** kristof.meixner@fatlenny.net | **I** kristofmeixner | **Q** kristofmeixner | **J** +43 664 1016454

### Summary

Kristof Meixner holds a PhD in Computer Science since 2024 and a Master's degree in Business Informatics since 2018 from TU Wien, Austria, where he is currently a Postdoctoral Researcher in the Software Engineering research unit. Despite experiencing an accident in 2000 resulting in a spinal cord injury, making him dependent on a wheelchair, after a break, he resumed in 2003 and successfully completed his studies. His PhD research explored model-based software product line engineering for cyber-physical production systems, addressing the integration of interdependent models for products, processes, and resources. His work focuses on advancing software engineering by developing innovative methods, tools, and techniques to create reliable, reusable systems that improve quality, resilience, and user experience. With a strong foundation in empirical research methods, his expertise spans software and information systems engineering. He is an active TU Wien member and a Scientific Staff Council representative at the Faculty of Informatics. As a person with a disability, he also served as a representative on the TU Wien Diversity Team for the Diversitas 2016 Award. Alongside his studies, Kristof gathered professional experience while working for several years as a lead developer on an open-source project specializing in software architecture, development, and quality. This combination of research and industry expertise drives his contributions to bridge the gap between theoretical innovation and real-world application in software engineering.

Publications:	87 peer-reviewed publications in journals (JSS, AT,) and conferences (SPLC, ETFA,), Citations: 754, h-index: 16, i-index: 27
Teaching:	6 lectures partly with exercises, 9 supervised theses
Leaderhip:	Lead software developer for the software of CDL-SQI, 9 supervised theses
Industry Projects:	Collaboration with logi.cals in the CDL-FLEX, Collaboration with STIWA, SWQL, VW, Neumann in the CDL-SQI over up to 7 years
Open-Source Beiträge:	OpenEngSB, Karaf, ops4j, JabRef, smooks

# Education

TU Wien PhD in Computer Science Vienna, Austria 2018 - 2024

· Thesis: Efficient Reuse & Variability Management for Cyber-Physical Production System Families

TU Wien MSc in Business Informatics Vienna, Austria 2011 - 2018

• Thesis: Model Driven Systems Configuration - Improving the Efficiency & Quality of Engineering Process Assembly based on Variability Modeling

# Experience

Postdoctoral Researcher	Dec 2024 – present
Institute of Information Systems Engineering, TU Wien	Vienna, Austria
Researcher	Mar 2018 – Dec 2024
CDL for Security & Quality Improvement in Production Systems, TU Wien	Vienna, Austria
Software Developer	Jan 2018 Feb 2018
CDL for Security & Quality Improvement in Production Systems, TU Wien	Vienna, Austria
Software Consultant	Jan 2017 – Dec 2017
logi.cals	St. Pölten, Austria
Software Developer	May 2017 – Dec 2017
Quality Software Engineering Group, TU Wien	Vienna, Austria
Software Developer & Lead Software Developer	Jan 2010 – Dec 2016
CDL for Flexible Automation Systems	Vienna, Austria
Freelancer	Sep 2003 – present
Various customers	Remote, Vienna, Austria
ICT Consultant	Sep 2003 – Jan 2019
Kleintierklinik Breitensee	Vienna, Austria
Software Engineering Tutor	Oct 2007 – Mar 2011
Quality Software Engineering Group, TU Wien	Vienna, Austria
Student Trainee	Apr 2000 – Aug 2000
Siemens EZE – Quality Management	Vienna, Austria
Internship	Feb 2000
Siemens TCN	Vienna, Austria

# **Publications**

For an extensive list of publications see GScholar: https://scholar.google.com/citations?user=hdsHN EAAAAJ

# Five most important publications

- Fadhlillah et al.: *Managing Control Software Variability in Cyber-Physical Production Systems: The V4rdiac Approach.* Journal of Systems and Software, 2025.
- Meixner et al.: *Variability modeling of products, processes, and resources in cyber-physical production systems engineering.* J. of Systems and Softw., 2024.
- Meixner et al.: *Organizing reuse for production systems engineering with capabilities and skills.* Automatisierungstechnik, 2023.
- Meixner et al.: *Patterns for Reuse in Production Systems Engineering*. Int. J. Softw. Eng. Knowl. Eng., 2021.
- Meixner et al.: A Domain-Specific Language for Product-Process-Resource Modeling. IEEE ETFA, 2021.

# **Faculty Service**

#### **Research Unit Representative**

Oct 2017 - present

Software Engineering Research Unit, TU Wien

Vienna, Austria

• Representative for the Research Unit Software Engineering in the Scientific Staff Council

#### **TU Wien Diversitas Representative**

Dec 2016

TU Wien

Vienna, Austria

Representative in TU Wien Diversity Team for the Diversitas 2016 Award<sup>1</sup>

#### Scientific Community Service

# Organizer

- International Workshop on Variability and Evolution of Software-Intensive Systems (VariVolution) at SPLC (2021, 2022, 2023)
- Special Session on Capability- and Skill-based Engineering in Manufacturing at ETFA (2021, 2022, 2023, 2024)
- Special Session on Software Engineering for Cyber-physical Production Systems at ETFA (2023, 2024)
- Feature-oriented Software Development Meeting (FOSD) (2021)

#### Journal Reviewer

- Expert Systems with Applications (2023)
- Journal of Cleaner Production (2023)
- Journal of Systems and Software (2022, 2024)
- International Journal on Software Engineering and Knowledge Engineering (2021)
- Automatisierungstechnik (2021, 2023, 2024)

#### **Program Committee Member**

- IEEE International Conference on Emerging Technologies and Factory Automation (ETFA) (2020-2024)
- International Systems and Software Product Line Conference (SPLC) Artifact Track (2021, 2022, 2023)
- International Conference on Software Engineering & Knowledge Engineering (SEKE) (2022)
- IEEE International Conference on Business Informatics (CBI) (2022, 2024)
- Software Quality Days (SWQD) (2019, 2020, 2021, 2023)

#### Teaching Experience

Lecturer in "Advanced Software Engineering"	2018 – present
Master's course, TU Wien	Vienna, Austria
Lecturer in "Software Engineering and Project Management"	2018 – present
Bachelor's course, TU Wien	Vienna, Austria
Lecturer in "Seminar in Software Engineering"	2018 – present
Master's course, TU Wien	Vienna, Austria
Lecturer in "Scientific Research and Writing"	2020 – present
Bachelor's course, TU Wien	Vienna, Austria
Guest Lecturer at "Convide Lecture Series"	Summer term 2024
Master's course, KIT	Karlsruhe, Germany

<sup>&</sup>lt;sup>1</sup>Diversitas 2016 Award: https://www.tuwien.at/tu-wien/aktuelles/news/diversitas-2016-auszeichnung-fuer-tu-wien

 Convide Lecture Series – Product Lines Beyond Software – How Cyber-Physical Production Systems Challenge Software Product Line Approaches<sup>2</sup>

Lecturer in "Business Intelligence"

Winter term 2020

Master's course, TU Wien

Vienna, Austria

Lecturer in "Business Process Modeling"

Winter term 2020

Bachelor's course, TU Wien

Vienna, Austria

Advisees

Diana Vysoka

2024

Master's thesis, TU Wien

Vienna, Austria

• Multi-domain Change Impact Analysis for Agile Cyber-Physical Production Systems Engineering

Kevin Knecht

2023

Bachelor's thesis, TU Wien

Vienna, Austria

 Information Propagation in Multi-View Graphs Applications in Cyber-Physical Production Systems Engineering

**Christoph Burger** 

2022

Master's thesis, TU Wien

Vienna, Austria

Model difference analysis for CPPS engineering models with variability

**Victor Olusesi** 

2023

Bachelor's thesis, TU Wien

Vienna, Austria

A Transformation Framework for CPPS Artifacts into PPR-DSL Translations

Philp Liszt

2021

Bachelor's thesis, TU Wien

Vienna, Austria

 Handling Variability in Production Systems Engineering - Feature and Resource Identification from Product Process Resource Model Variants

**Xuan Phuong** 

2021

Bachelor's thesis, TU Wien

Vienna, Austria

 Migration of Industrial Engineering Databases - A Case Study in a Cyber-Physical Production System Setting

Jakob Decker

2020 Vienna, Austria

Bachelor's thesis, TU Wien

aginooring

• A DSL to Store and Evaluate PPR Assembly Sequences for Multi-Disciplinary Engineering

Hannes Marcher

2020

Bachelor's thesis, TU Wien

Vienna, Austria

• PPR Consistency Dependency Language for CPPS Engineering

Michael Wapp

2019

Master's thesis, TU Wien

Vienna, Austria

· Performance of paradigms for storing and querying multidisciplinary engineering models

Extracurriculars

**ICT Shadow** 

Nov 2015

UN Shadowing Programme 2015

Vienna, Austria

• UN Shadowing Programme 2015 at the International Atomic Energy Agency Vienna

<sup>&</sup>lt;sup>2</sup>Convide Lecture Series: https://www.sfb1608.kit.edu/206.php

#### **Technical Skills**

Programming Languages: Java, JavaScript, Python, Groovy, PHP, Bash, XML/HTML, JSON, UML

IDEs: Eclipse, IntelliJ, VS Code SCM: Git, SVN, Mercurial Build Tools: Maven, Ant

**Testing and CI**: JUnit, Selenium, Jenkins **Databases**: MySQL, PostgreSQL, HSQLDB, H2 **Container**: Apache HTTP, Tomcat, Jetty

Operating Systems: Linux (Ubuntu, Debian), Mircosoft Windows (7/10)

Productivity: Confluence, JIRA, Mircosoft Office (Word, Excel, Powerpoint), Libre Office (Writer,

Calc, Impress), Latex, Visio, Dia Methods: Scrum, Pair programming, TDD

Libraries: OSGI, Apache Karaf, Blueprint, pax-exam, Apache Wicket, ActiveMQ, JGit, Lucene,

FreeMarker, Groovy, Google Guice, Smooks, Docker, Vagrant

#### Soft Skills

Languages: German (native), English (proficient), Italian (intermediate)