

Sebastian Böhm
Maxim Vidgof

ZEUS 2025

17th ZEUS Workshop, ZEUS 2025,
Vienna, Austria, 20–21 February 2025
Proceedings

[CEUR-WS.org/Vol-4030/preface.pdf](https://ceur-ws.org/Vol-4030/preface.pdf)

Volume Editors

Sebastian Böhm
University of Bamberg, Distributed Systems Group
An der Weberei 5, DE-96049 Bamberg

Maxim Vidgof
Wirtschaftsuniversität Wien

Copyright ©2025 for the individual papers by the papers' authors.

Copyright ©2025 for the volume as a collection by its editors.

This volume and its papers are published under the Creative Commons License Attribution 4.0 International (CC BY 4.0).

Preface

In February, we had the pleasure to organize the 17th edition of the ZEUS Workshop planned in Vienna, Austria. This time, the workshop was held on-site again, giving us the chance to meet and discuss up-to-date research in person. We would like to thank all reviewers a lot for their work and ongoing support.

This workshop series offers young researchers an opportunity to present and discuss early ideas and work in progress as well as to establish contacts among young researchers. For this year's edition, we selected all 8 submissions for presentation at the workshop. Each submission went through a thorough peer-review process and was assessed by at least three members of the program committee with regard to its relevance and scientific quality. The accepted contributions cover the areas of Business Process Management, Cloud Computing, Microservices, Software Design, Internet of Things and Artificial Intelligence. The workshop program was further enriched by keynotes from both academia and the industry. Stephan Haarmann from Camunda Services GmbH, Germany, presented how process orchestration can help to avoid AI-Silos by integrating AI in end-to-end processes, and at the same time, remaining flexible effectively shortening the time to market and future proofing businesses (title of the talk: *Process Orchestration and AI*). David Shipilov from Celonis Deutschland GmbH, gave a talk about *Process Intelligence with Celonis*. The third keynote was given by Jan Mendling from Humboldt University of Berlin, Germany. He presented insights on *Evaluation of Algorithmic Contributions*. The best presentation award was given to Roman Kudravcev for his talk on *Seamless Migration of Containerized Stateful Applications in Orchestrated Edge Systems*.

Lastly, we would like to thank Maxim Vidgof and Aleksandar Gavric from Vienna University to host this year's edition of ZEUS.

The workshop was generously sponsored by Celonis Deutschland GmbH, Dr. Maxim Vidgof, Camunda Services GmbH, and envite consulting GmbH.

Vienna, February 2025

Sebastian Böhm
Maxim Vidgof

Organization

Steering Committee

Oliver Kopp	Kopp Solutions
Johannes Manner	University of Bamberg
Robin Lichtenthäler	University of Bamberg
Stephan Haarmann	Camunda GmbH
Daniel Lübke	Digital Solution Architecture GmbH

Local Organizer

Maxim Vidgof	Vienna University, Germany
Alexander Gavric	Vienna University, Germany

Web Chair

Robin Lichtenthäler	University of Bamberg
Sebastian Böhm	University of Bamberg

Program Committee Chair

Sebastian Böhm	University of Bamberg
----------------	-----------------------

Program Committee

Saimir Bala	Vienna University of Economics and Business
Marius Breitmayer	Vienna University
Achim D. Bruckner	University of Exeter
Jonas Cremerius	Hasso Plattner Institute, University of Potsdam
Stephan Fahrenkrog-Peterson	Humboldt-Universität Berlin
Manuel Fritz	University of Stuttgart
Georg Grossmann	University of South Australia
Lukas Harzenetter	University of Stuttgart
Thomas Heinze	German Aerospace Center
Pascal Hirmer	University of Stuttgart
Christoph Hochreiner	Compass Verlag
André van Hoorn	University of Hamburg
Martin Kabierski	Humboldt-Universität zu Berlin
Simone König	Mercedes-Benz AG, TU Munich
Jan Ladleif	Hasso Plattner Institute, University of Potsdam
Jörg Lenhard	SAP SE
Robin Lichtenthäler	University of Bamberg
Daniel Lübke	Digital Solution Architecture GmbH
Matteo Nardelli	University of Rome Tor Vergata
Adrian Rebmann	University of Mannheim
Fabiana Rossi	University of Rome Tor Vergata
Stefan Schulte	Vienna University of Technology
Jan Sürmeli	FZI Forschungszentrum Informatik, Karlsruhe
Maximilian Völker	Hasso Plattner Institut
Tom Lichtenstein	Hasso Plattner Institut
Stefan Winzinger	University of Bamberg

Sponsoring Institutions

Celonis Deutschland GmbH

Dr. Maxim Vidgof

Camunda Services GmbH

envite consulting GmbH

Contents

Alignment of Process Lifecycle and Software Product Line Engineering Phases <i>Philipp Hehnle and Manfred Reichert</i>	1
Studying domain dependence in BPMN process modeling: An empirical research proposal <i>Thomas S. Heinze</i>	8
Towards Model Consistency between abstract and explicit Delay-Robustness in Timed Graph Transformation System <i>Mustafa Ghani</i>	12
A Review of Software Architecture Optimization Approaches for Cloud Applications <i>Anton Frisch and Robin Lichtenthäler</i>	16
Seamless Migration of Containerized Stateful Applications in Orchestrated Edge Systems <i>Roman Kudravcev and Sebastian Böhm</i>	26
Comparing Cloud and On-Premises Kubernetes: Insights into Networking and Storage Tooling <i>Jakob Koller and Sebastian Böhm</i>	33
Business Instance Monitoring <i>Lisa Arnold</i>	40
Surgery AI: Multimodal Process Mining and Mixed Reality for Real-time Surgical Conformance Checking and Guidance <i>Aleksandar Gavric, Dominik Bork and Henderik A. Proper</i>	48
Author Index	56