



# Philipp Leitner

*Curriculum Vitæ (October 10, 2022)*

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## SUMMARY

I am an associate professor (docent) of cloud-based software engineering at Chalmers University of Technology, working in the Interaction Design and Software Engineering (IDSE) division. I teach and conduct research on software development tools for Internet-based systems. Recently, much of my research is on software performance engineering, with a special focus on tools that enable rapid releases of efficient cloud software. I currently supervise or co-supervise a team of 5 PhD students working in the above topics, and have graduated three successful students.

My research is funded through WASP, VR, Vinnova, and the Chalmers Area of Advance on ICT. I hold a PhD degree in business informatics from Vienna University of Technology (2011), and have (co-)authored more than 100 publications to date, leading to an h-index of 40 as tracked by Google Scholar. Recent publication highlights include papers at ICSE, FSE, TSE, EMSE, and an award-winning paper at the USENIX Middleware conference.

In addition to my research and teaching, I organized events (e.g., a Dagstuhl seminar on software performance engineering, or the Vienna Software Seminar series) and special issues related to my area of research. I serve on the programme committee of many of the most visible conferences in the field (e.g., MSR, ICSME, ICPE), and have also acted in organisational roles (e.g., PC chair at ICPE in 2022) for various conferences.

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## RECENT APPOINTMENTS

<b>Associate Professor</b> <i>Chalmers   University of Gothenburg</i>	Since Oct. 19
<b>ICT Area of Advance Assistant Professor (tenure-track)</b> <i>Chalmers University of Technology</i>	Aug. 17 - Oct. 19
<b>Senior Research Associate</b> <i>University of Zurich</i>	Jan. 14 - July 17
<b>Postdoctoral Researcher</b> <i>Vienna University of Technology</i>	Nov. 2011 - Dec. 2013

## RECENT ACQUIRED GRANTS

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Debloating ML Systems (2021)	Funding: AoA SEED Grant	Role: Co-PI
FFI TRAF-Cloud (2019 - 2022)	Funding: Vinnova	Role: Co-PI
VR Starting Grant (2019 - 2023)	Funding: VR	Role: PI
WASP Student (2017 - 2022)	Funding: WASP	Role: PI
MINCA (2016 - 2019)	Funding: SNF (Swiss)	Role: PI

## SELECTED RELEVANT PUBLICATIONS [\[full list on Google Scholar\]](#)

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- C. Laaber, H. C. Gall, and **P. Leitner**: *Applying Test Case Prioritization to Software Microbenchmarks*, Empirical Software Engineering (EMSE), 2021
- C. Laaber, S. Würsten, H. C. Gall, and **P. Leitner**: *Dynamically Reconfiguring Software Microbenchmarks: Reducing Execution Time Without Sacrificing Result Quality*, Symposium on the Foundations of Software Engineering (ESEC/FSE), 2020 (**particularly relevant**)
- L. Erlenhov, F. Gomes, and **P. Leitner**: *An Empirical Study of Bots in Software Development - Characteristics and Challenges from a Practitioner's Perspective*, Symposium on the Foundations of Software Engineering (ESEC/FSE), 2020 (**particularly relevant**)
- D. Costa, CP. Bezemer, **P. Leitner**, and A. Andrzejak: *What's Wrong With My Benchmark Results? Studying Bad Practices in JMH Benchmarks*, IEEE Transactions on Software Engineering (TSE), 2019. (**particularly relevant**)
- C. Laaber, J. Scheuner, and **P. Leitner**: *Software Microbenchmarking in the Cloud. How Bad is it Really?*, Empirical Software Engineering (EMSE), 2019
- **P. Leitner**, E. Wittern, J. Spillner, and W. Hummer: *A Mixed-Method Empirical Study of Function-as-a-Service Software Development in Industrial Practice*, Journal of Systems and Software (JSS), 2019
- J. Cito, **P. Leitner**, M. Rinard, and H. C. Gall: *Interactive Production Performance Feedback in the IDE*, International Conference on Software Engineering (ICSE), 2019 (**particularly relevant**)
- **P. Leitner** and J. Cito: *Patterns in the Chaos – a Study of Performance Variation and Predictability in Public IaaS Clouds*, ACM Transactions on Internet Technology (TOIT), 2016
- G. Schermann, D. Schöni, **P. Leitner**, and H. C. Gall: *Bifrost – Supporting Continuous Deployment with Automated Enactment of Multi-Phase Live Testing Strategies*, ACM/IFIP/USENIX Middleware Conference, 2016
- J. Cito, **P. Leitner**, T. Fritz, and H. C. Gall: *The Making of Cloud Applications – An Empirical Study on Software Development for the Cloud*, Symposium on the Foundations of Software Engineering (ESEC/FSE), 2015 (**particularly relevant**)