

Philipp Leitner

Curriculum Vitæ (September 9, 2025)

SUMMARY

I am an associate professor (docent) of software engineering at Chalmers University of Technology. 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 a team of three PhD students working in the above topics, and have graduated six highly 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 close to 150 publications to date. Recent publication highlights include papers at ICSE, FSE, TSE, EMSE, and SIGMETRICS.

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., ICSE, FSE, ASE, ICPE), and have also acted in organisatorial roles for various conferences (e.g., PC chair at ICPE in 2022).

Web: https://icet-lab.eu, philipp.leitner@chalmers.se

GS: https://scholar.google.ch/citations?user=wZ9f8CAAAAAJ (h-index: 48, citations: 7700+)

WoS: 124 publications total, 24 last 10 years, h-index 28, 2297 citations

RECENT APPOINTMENTS

Associate Professor Since Oct. 19

Chalmers | University of Gothenburg

ICT Area of Advance Assistant Professor (tenure-track)

Aug. 17 - Oct. 19

 $Chalmers\ University\ of\ Technology$

Senior Research Associate Jan. 14 - July 17

University of Zurich

Postdoctoral Researcher Nov. 2011 - Dec. 2013

Vienna University of Technology

RECENT ACQUIRED GRANTS (TOTAL AROUND 28 MSEK)

WASP PhD (3x) Funding: WASP Role: PI

(2017 - 2030) VR Starting Grant Funding: VR Role: PI

VR Starting Grant Funding: VR Role: PI (2019 - 2023)

FFI TRAF-Cloud Funding: Vinnova Role: Co-PI (2019 - 2022)

MINCA Funding: SNF (Swiss) Role: PI (2016 - 2019)

CURRENT PHD STUDENTS

Ranim Khojah, Lirong (Esme) Yi, Linda Erlenhov

SELECTED RELEVANT PUBLICATIONS [full list on Google Scholar]

- R. Khojah, F. Gomes, M. Mohamad, and **P. Leitner**: *The Impact of Prompt Programming on Function-Level Code Generation*, IEEE Transactions on Software Engineering (TSE), 2025. To appear
- R. Khojah, M. Mohamad, **P. Leitner**, and F. Gomes: Beyond Code Generation: An Observational Study of ChatGPT Usage in Software Engineering Practice. Proceedings of the ACM International Conference on the Foundations of Software Engineering (FSE). 2024
- H. Zhang, M. Alhanahnah, F. Ahmed, D. Fatih, **P. Leitner**, and A. Ali-Eldin: *Machine Learning Systems are Bloated and Vulnerable*. SIGMETRICS International Conference on Measurement and Modeling of Computer Systems, 2024
- M Jangali, Y. Tang, N. Alexandersson, **P. Leitner**, J. Yang, and W. Shang: Automated Generation and Evaluation of JMH Microbenchmark Suites from Unit Tests, IEEE Transactions on Software Engineering (TSE), 2022
- 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
- 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
- J. Cito, **P. Leitner**, M. Rinard, and H. C. Gall: *Interactive Production Performance Feedback* in the *IDE*, International Conference on Software Engineering (ICSE), 2019
- 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
- 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