



Philipp Leitner

Curriculum Vitæ (June 17, 2020)

SUMMARY

I am currently an Area of Advance assistant professor at Chalmers University of Technology in the Software Engineering division. I teach and conduct research on software development for service- and cloud-based systems. Most of my recent work is on software performance engineering in cloud projects, with a special focus on co-optimizing end user performance and cloud deployment costs. I (co-)supervise 3 PhD students working in the above topics.

My research is primarily funded through the Swiss National Science Foundation, the Hasler foundation, the European Union's 7th framework programme, and the Chalmers Area of Advance on ICT. I hold a PhD degree in business informatics from Vienna University of Technology. I have (co-)authored more than 90 publications to date, leading to an h-index of 24 as tracked by Google Scholar. Recent publication highlights include an award-winning paper at the USENIX Middleware conference, as well as multiple well-received papers in top venues of software engineering (e.g., ICSE Software Engineering in Practice, or the Mining Software Repositories conference).

In addition to my research and teaching, I have organized events (e.g., a recent Dagstuhl GI seminar) 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., ICPE, ICSOC, CLOUD), and have also acted in organisational roles (e.g., tutorial chair, workshop chair) in various conferences.

RECENT APPOINTMENTS

ICT Area of Advance Assistant Professor (tenure-track) From Aug. 17
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 RESEARCH PROJECT EXPERIENCE

MINCA (2016 - Ongoing)	<i>Funding:</i> SNF (Swiss)	<i>Role:</i> Applicant and PI
DevCloud (2016)	<i>Funding:</i> Hasler Foundation (Swiss)	<i>Role:</i> Co-Applicant
CloudWave (2013 - 2016)	<i>Funding:</i> FP7 (Europe)	<i>Role:</i> Co-PI for UZH
ACROSS (2013 - Ongoing)	<i>Funding:</i> COST Action (Europe)	<i>Role:</i> WG Leader

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

- J. Cito, F. Oliveira, **P. Leitner**, P. Nagpurkar, and H. C. Gall: *Context-Based Analytics – Establishing Explicit Links between Runtime Traces and Source Code*, In Proceedings of the 38th International Conference on Software Engineering (ICSE'17) – Software Engineering in Practice (SEIP) Track, 2017.
- **P. Leitner** and CP. Bezemer: *An Exploratory Study of the State of Practice of Performance Testing in Java-Based Open Source Projects*, in Proceedings of the 7th ACM/SPEC International Conference on Performance Engineering (ICPE), 2017.
- C. Davatz, C. Inzinger, J. Scheuner, and **P. Leitner** : *An Approach and Case Study of Cloud Instance Type Selection for Multi-Tier Web Applications*, in Proceedings of the 17th IEEE/ACM International Symposium on Cluster, Cloud and Grid Computing (CCGrid), 2017.
- J. Cito, G. Schermann, E. Wittern, **P. Leitner**, S. Zumberi, and H. C. Gall: *An Empirical Analysis of the Docker Container Ecosystem on GitHub*, in Proceedings of the 14th International Conference on Mining Software Repositories (MSR), 2017.
- T. Rausch, W. Hummer, **P. Leitner**, and S. Schulte: *An Empirical Analysis of Build Failures in the Continuous Integration Workflows of Java-Based Open-Source Software*, in Proceedings of the 14th International Conference on Mining Software Repositories (MSR), 2017.
- G. Schermann, D. Schöni, **P. Leitner**, and H. C. Gall: *Bifrost – Supporting Continuous Deployment with Automated Enactment of Multi-Phase Live Testing Strategies*, in Proceedings of the 2016 ACM/IFIP/USENIX Middleware Conference. **Best Student Paper Award**.
- **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), vol. 16, iss. 3, 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*, in Proceedings of the 10th Joint Meeting of the European Software Engineering Conference and the ACM SIGSOFT International Symposium on Foundations of Software Engineering (ESEC/FSE), New York, NY, USA, 2015.
- J. Cito, **P. Leitner**, H. C. Gall, A. Dadashi, A. Keller, and A. Roth: *Runtime Metric Meets Developer – Building Better Cloud Applications Using Feedback*, in Proceedings of the 2015 ACM International Symposium on New Ideas, New Paradigms, and Reflections on Programming & Software (Onward! 2015), New York, NY, USA, 2015.
- R. Zabolotnyi, **P. Leitner**, W. Hummer, and S. Dustdar: *JCloudScale: Closing the Gap Between IaaS and PaaS*, ACM Transactions on Internet Technology (TOIT), vol. 15, iss. 3, p. 10:1–10:20, 2015.
- **P. Leitner**, W. Hummer, B. Satzger, C. Inzinger and S. Dustdar: *Cost-Efficient and Application SLA-Aware Client Side Request Scheduling in an Infrastructure-as-a-Service Cloud*, in: Proceedings of the IEEE International Conference on Cloud Computing (CLOUD'12), 2012
- **P. Leitner**, W. Hummer and S. Dustdar: *Cost-Based Optimization of Service Compositions*, IEEE Transactions on Services Computing (TSC). 2011, doi:10.1109/TSC.2011.53