



Philipp Leitner

Curriculum Vitæ (September 6, 2019)

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SUMMARY

I am currently Associate Professor (Docent) of Cloud-Based Software Engineering at Chalmers and University of Gothenburg, Sweden, where I lead the Internet Computing and Emerging Technologies (ICET) lab. I hold a PhD degree from Vienna University of Technology (in business informatics, focussing on cost-aware service composition). My current research interests are software performance engineering, especially in the context of Web- and cloud-based systems. My research is funded by Chalmers through the ICT Area of Advance, the Wallenberg Autonomous Systems Program (WASP), Vetenskapsrådet, and the Swiss National Science Foundation. I have published around 100 peer-reviewed publications, leading to an h-index of 31 as tracked by Google Scholar.

EDUCATION

PhD Business Informatics <i>Vienna University of Technology</i>	Oct. 2007 - Oct. 2011
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On Preventing Violations of Service Level Agreements in Composed Services using Self-Adaptation
Thesis advisor: Prof. Schahram Dustdar

MSc Business Informatics <i>Vienna University of Technology</i>	Nov. 2005 - Sep. 2007
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BSc Business Informatics <i>Vienna University of Technology</i>	Oct. 2002 - Oct. 2005
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APPOINTMENTS AND WORK HISTORY

Associate Professor (Docent) <i>Chalmers University of Gothenburg</i>	Since Nov. 19
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- Leader of the ICET-lab

Assistant Professor <i>Chalmers University of Gothenburg</i>	Aug. 17 - Oct. 19
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- Tenure-Track Assistant Professor

- Part of the ICT Area of Advance

Senior Research Associate

Jan. 2014 - Jul. 2017

University of Zurich

- Research team leader “cloud-based software engineering”
- PI for SNF project MINCA and Co-PI for Hasler Dev-Cloud and FP7 CloudWave
- Lecturer of various undergrad and graduate courses

Postdoctoral Researcher

Nov. 2011 - Dec. 2013

Vienna University of Technology

- Conducted research on cloud computing and middleware
- Taught courses *Advanced Internet Computing* and *Distributed Systems Technologies* on graduate level
- Supervised a large number of master students in their thesis work

Research and Teaching Assistant

Oct. 2007 - Oct. 2011

Vienna University of Technology

- Conducted research on service-based systems engineering
- Taught various courses as TA

Research Software Engineer

Jul. 2005 - Sep. 2007

Siemens PSE, Vienna

- Worked on industrial research project in the area of telecommunications and network management

Independent Software Engineer

2003 - 2006

Various smaller Web projects

Teaching Assistant

2003 - 2007

Vienna University of Technology

ACQUIRED GRANTS

- FFI TrafCloud (2019 – 2021), VINNOVA
Co-applicant
Chalmers budget 5,500,000 SEK (my part \approx 3,200,000 SEK)
- VR Starting Grant (2019 – 2022), VR
Sole applicant
Grant value 3,639,000 SEK
- WASP Academic PhD Student (2017 – 2021), WASP
Academic Supervisor
Grant value \approx 3,600,000 SEK
- Chalmers AoA Hiring Startup Package (2017 – 2021), ICT Area of Advance
Sole recipient
Grant value 8,000,000 SEK

- Individual Project “MINCA” (2016 – 2019), Swiss National Science Foundation
Sole applicant
Grant value 180,000 CHF (\approx 1,630,000 SEK), at University of Zurich
- Technology Transfer Project “DevCloud” (2016 – 2019), Hasler Foundation
Co-applicant
Grant value 50,000 CHF (\approx 453,000 SEK), at University of Zurich

RESEARCH VISITS

Institute of of High-Performance Computing, Singapore
University of Stuttgart, Germany

Feb./Mar. 2013
Apr. 2010

INVITED TALKS AND SEMINARS

- *Performance stability of (public) clouds*, Invited Talk at Vehicle Electronics and Connected Services (VECS, industrial conference), April 2019
- *AWS Lambda and serverless. What’s all the fuzz about?*, Invited Talk at the Chaos Engineering Days Stockholm, December 2018
- *Software performance testing in a public cloud – how bad is it really?*, Invited Talk at the Metrics Day 2018, October 2018
- *Performance Testing of and in the Cloud*, Invited Lecture at the IDEA League Doctoral School on Engineering Complex Systems and IT with Big data and Information Technology, September 2018
- *Predictability of Performance in Public Clouds - Some Empirical Data and Lessons Learned for Software Performance Testing*, Seminar at IBM Research, Ireland, November 2017
- *Predictability of Performance in Public Clouds - Some Empirical Data and Lessons Learned for Software Performance Testing*, Invited Talk at the Sixth International Workshop on Load Testing and Benchmarking of Software Systems (LTB 2017), co-located with ICPE’17, April 2017
- *Your User is the Canary - Practices of and Obstacles to Conducting Experiments in Production*, CHOOSE Forum, University of Zurich, September 2016
- *How Predictable is the Performance of IaaS Instances? Some Insights from Benchmarking EC2, GCE, Azure, and Softlayer*, Open Cloud Day, ZHAW Winterthur, June 2016
- *Software Development for the Cloud – Challenges and Opportunities*, Faculty of Informatics, University of Lugano, February 2016
- *Software Development for the Cloud – Challenges and Opportunities*, VU University Amsterdam, November 2015
- *Trends, Opportunities and Challenges of Software Development for the Cloud*, Indian Institute of Technology Ropar, November 2015

- *Trends, Opportunities and Challenges of Software Development for the Cloud*, Indian Institute of Technology New Delhi, November 2015
- *Software Development for the Cloud – Challenges and Opportunities*, Chalmers, Gothenburg, June 2015
- *Engineering Java Applications for the Infrastructure-as-a-Service Cloud*, software evolution & architecture lab, University of Zurich, Zurich, October 2013
- *Building Applications for the Infrastructure-as-a-Service Cloud with CloudScale*, IMDEA Software Institute, Madrid, April 2013
- *Building Elastic Java Applications based on CloudScale and the Infrastructure-as-a-Service Paradigm*, National University of Singapore, School of Computing, March 2013
- *Building Elastic Java Applications based on CloudScale and the Infrastructure-as-a-Service Paradigm*, University of Illinois Advanced Digital Sciences Center, Singapore, February 2013

DEPARTMENT SERVICE

- Postdoc Representative at the Department of Informatics, University of Zurich (2015 - 2016)
- Member of the Habilitation Committee of Ivona Brandic (TU Vienna, 2013)
- Member of the Habilitation Committee of Karl Michael Göschka (TU Vienna, 2012)

PROFESSIONAL SERVICE

Organized Events

- Co-Organizer of the 1st and 2nd *Vienna Software Seminar (VSS)* on the Relation of Software Architecture and DevOps/Continuous Delivery. Organizers: Uwe Zdun, Philipp Leitner, Florian Rosenberg, Erik Wittern.
- Member of the Steering Committee of the International Workshop on Quality-Aware DevOps (QUDOS). From 2018.
- Dagstuhl GI Seminar on *Software Performance Engineering in the DevOps World* (September 26th – September 30th 2016, Schloss Dagstuhl, Germany). Co-organized with Andre van Hoorn, Pooyan Jamshidi, and Ingo Weber.
- Half-day *CloudWave Training Event* (September 5th 2016, TU Vienna, Austria). Half-day session at ESOC'16. Co-organized with Andreas Metzger and Eliot Salant.

Editorial Memberships

- Publicity Chair of Elsevier's Journal on Systems and Software (JSS). Responsible for coordinating and implementing the publicity efforts of the journal.
- Special Issue on Converging Fog and Cloud Computing, in IEEE Cloud Computing. Co-edited with Erik Elmroth, Stefan Schulte, and Srikumar Venugopal.

- Academic Editor of PeerJ Computer Science
- Special Issue on Software Tools and Technologies for Monitoring and Prediction of Cloud Services, in Software: Practice and Experience (published by Wiley-Blackwell). Co-edited with Rajiv Ranjan, Rajkumar Buyya, Armin Haller, and Stefan Tai

Chairmanships

- Publication Chair of 10th ACM/SPEC International Conference on Performance Engineering (ICPE)
- PC Co-Chair of the 3rd International Workshop on Quality-Aware DevOps (QUDOS), co-located with the 8th ACM/SPEC International Conference on Performance Engineering (ICPE 2017)
- Co-Chair of a Special Session on Services Computing and Internet Technologies (SerCo 2016) at the International Conference on High Performance Computing & Simulation (HPCS 2016)
- Tutorial Chair of the 16th International Conference on Web Engineering (ICWE2016)
- Workshop Chair of the European Conference on Service-Oriented and Cloud Computing (ESOCC) 2015.
- General Chair of the 1st International Workshop on Monitoring and Prediction of Cloud Services (MoPoC'12), co-located with ICSOC'12.

Reviews for Funding Agencies

- Natural Sciences and Engineering Research Council of Canada (NSERC)
- Deutscher Akademischer Austauschdienst (DAAD)
- Luxembourg National Research Fund (FNR)

Program Committee Memberships

- IEEE/ACM International Conference on Automated Software Engineering - Demonstration Track (ASE 2019)
- IEEE International Conference on Software Analysis, Evolution and Reengineering (SANER, from 2019)
- IEEE International Conference on Software Maintenance and Evolution (ICSME 2018)
- International Conference on Mining Software Repositories (MSR, from 2018)
- ACM International Conference on Distributed Event-Based Systems (DEBS 2018)
- ACM/SPEC International Conference on Performance Engineering (ICPE 2018, 2020)
- IEEE International Conference on Cloud Computing (CLOUD, 2015 – 2018)
- International Conference on the Quality of Information and Communications Technology (QUATIC, 2018)

- International Conference on Edge Computing (EDGE 2017)
- International Symposium on Fog and Edge Computing (ISFEC 2017)
- Euromicro Conference on Software Engineering and Advanced Applications (SEAA, 2018)
- International Conference on Service-Oriented Computing (ICSOC, 2015 – 2017)
- European Conference on Service-Oriented and Cloud Computing (ESOCC, 2015, 2017)
- International Conference on Web Engineering (ICWE, 2015, 2019)
- IEEE/ACM International Utility and Cloud Computing Conference (UCC, 2014 – 2017)
- International Conference on Service Oriented Computing and Applications (SOCA, 2014 – ongoing)
- Cloud Challenge, held in conjunction with UCC (2014)
- International Workshop on RESTful Designs (WS-REST, co-located with WWW, 2018)
- International Workshop on Software Engineering Aspects of Continuous Development and New Paradigms of Software Production and Deployment (DEVOPS, 2018)
- International Workshop on Autonomous Control for Performance and Reliability Trade-offs in Internet of Services (ACPROSS, 2017)
- International Workshop on Inter-Organizational Processes (IOPs, 2016)
- International Workshop on Big Data Software Engineering (BIGDSE, 2015 – ongoing)
- EAI International Conference on Cloud, Networking for IoT Systems (CN4IoT, 2015)
- International Conference on Internet and Web Applications and Services (ICIW, 2014 – 2015)
- International Conference on the Future Internet of Things and Cloud (FiCloud, 2014)
- International Conference on Service Oriented Computing (ICSOC) Demonstration Track (2014 – ongoing)
- International Workshop on Federative and Interoperable Cloud Infrastructures (FedICI, 2014)
- International Workshop on Engineering Cloud Applications & Services (EnCASE, 2014)
- Central-European Workshop on Services and their Composition (ZEUS, 2012 – ongoing)
- International Workshop on Evolutionary Business Processes EVL-BP), co-located with EDOC (2011 – 2013)
- International Workshop on Principles of Engineering Service-Oriented Systems (PESOS), co-located with ICSE (2013)
- Track on Provisioning and Management of Service Oriented Architecture and Cloud Computing (PROMASC), a Track of the WETICE (2011 – 2012)
- International Workshop on Performance Assessment and Auditing in Service Computing (PAASC), co-located with ICSOC (2011 – 2012)

- Workshop on Emerging Web Services Technology (WEWST), co-located with ECOWS (2009 – 2011)
- International Workshop on Dynamic and Declarative Business Processes (DDBP), co-located with EDOC (2010)

Reviews for Journals

(partial list)

- IEEE Transactions on Software Engineering (TSE)
- Springer Empirical Software Engineering (ESEM)
- ACM Transactions on Internet Technology (TOIT)
- IEEE Transactions on Cloud Computing (TCC)
- Wiley Concurrency and Computation: Practice and Experience
- Oxford Press: The Computer Journal
- International Journal of Communication Networks and Distributed Systems (IJCNDs)
- Elsevier Information Processing Letters (IPL)
- IEEE Internet Computing (IC)
- IEEE Software
- Elsevier Journal of Parallel and Distributed Computing (JPDC)
- ACM Transactions on the Web (TWEB)
- Elsevier Journal of Systems and Software (JSS)
- Springer Computing (Archives for Scientific Computing)
- Journal of Computer Science and Technology (JCST)
- International Journal of Cooperative Information Systems (IJCIS)
- IEEE Transactions on Services Computing (TSC)
- Transactions on Pattern Languages of Programming (TPLoP)

TEACHING ACTIVITIES

Current PhD Students

- **Linda Erlenhov** (Chalmers, bots in software development)
- **Joel Scheuner** (Chalmers, cloud benchmarking)
- **Christoph Laaber** (UZH, microbenchmarking in CI builds, co-supervised with Harald C. Gall)

Graduated PhD Students

- **Gerald Schermann** (UHZ, continuous experimentation, co-supervised with Harald C. Gall, now Postdoc at UZH)
- **Jürgen Cito** (UZH, cloud performance engineering, co-supervised with Harald C. Gall, now Postdoc at MIT)

Teaching at Chalmers | GU

- Mobile and Web Development (DIT341) (2019, \approx 60 students)
- Data Management (DIT032/DAT335) (2018 - 2019, \approx 100 students)

Previous Teaching at University of Zurich

- Informatik 1 (fall 2014 – 2016, \approx 250 students)
- Advanced Software Engineering (spring 2014 – 2017, 10 – 20 students)
- Seminar Advanced Software Engineering (fall 2015 – 2016, 10 – 20 students)
- Master Basismodul (ongoing)
- Informatik-Vertiefung (ongoing)

Previous Teaching at TU Vienna

- VO 2.0 Verteilte Systeme (fall 2013, \approx 400 students)
- VU 2.0 Advanced Internet Computing (fall 2008 - 2013, 140 students)
- VU 4.0 Distributed Systems Technologies (spring 2009 - 2013, 140 students)
- PR 4.0 Internet Computing Lab Work (spring 2009 - 2013)
- UE 2.0 Verteilte Systeme (fall 2009 - fall 2010, \approx 400 students)
- VU 2.0 Grid Computing (spring 2008 - spring 2009, 10 students)

Thesis Supervision at Chalmers | University of Gothenburg

- Joel Sanderöd Roxell and Matthias Lundell: Automatic container profiling and resource prediction using container orchestration (master's thesis, 2019)
- Yunfang Guo: The Impact of Adopting Continuous Integration on the Delivery Time of Pull Requests - A Partial Replication and Extension (master's thesis, 2019)
- Joel Rollny: An Extensible Framework for Large-Scale Mining of Performance Microbenchmarks (master's thesis, 2018)
- Viktor Holmqvist and Jonathan Nilsfors: Cachematic - Automatic Invalidation in Application-Level Caching Systems (master's thesis, 2018)

Thesis Supervision at University of Zurich

All co-supervised with Prof. Harald C. Gall.

- Michael Susplugas: Continuous Integration and Deployment – Case Study in an Energy Trading Company (master's thesis, 2016)
- Christian Davatz: Application-aware Benchmarking of IaaS Cloud Services (master's thesis, 2016)
- Björn Hasselmann: Mining Performance-Relevant Code Changes from Source Code Repositories (bachelor thesis, 2016)
- Emanuel Stöckli: Predicting the Costs of Code Changes in Microservice Architectures based on Runtime Feedback (master's thesis, 2015)
- Ilia Rhyzhov: Performance Analysis of Virtual Machines from Two Major IaaS Providers – Amazon Web Services (EC2) and Google Compute Engine (GCE) (master's thesis, 2015)
- Christian Bosshard: Feedback Driven Development – Bringing Runtime Metrics to the Developer (master's thesis, 2015)
- Joel Scheuner: Cloud WorkBench - A Web-Based Framework for Benchmarking Public Cloud Services (bachelor thesis, 2014)

Master's Thesis Supervision at TU Vienna

All co-supervised with Prof. Shahram Dustdar.

- Fritz Schrogl: Transparently Migrating Java Objects at Runtime in an Infrastructure-as-a-Service Cloud (2014)
- Jürgen Cito: Statistical Methods in Web Performance (2014)
- Constantin-Claudiu Gavrillete: Exploiting User Behavior and Markup Structures to Improve Search Result Rankings (2013)
- Rene Nowak: Towards Providing Unified Access To Cloud Data Storage Services (2013)
- Denitsa Djamiykova: Monitoring the Correspondence of Physical and Virtual Network Resources in OpenFlow Based Software Defined Networks (2013)
- Johannes Ferner: Using Time Series Analysis to Predict Service Level Agreement Violations in Service Compositions (2012)
- Petra Bierleutgeb: VRoxy – Enriching SOAs With Proxy-Based Dynamic Binding and Reporting Based on VRESCo (joint work with mercatis information systems GmbH, 2012)
- Matthias Irlacher: Using Domain-specific Languages for Event-based QoS monitoring in Service-oriented Environments. (co-supervised with Ernst Oberortner, 2011)
- Mathias Hess: Reducing SLA Violations of Composite Services Deployed to the Cloud (2011)
- Stefan Prennschütz-Schützenau: SOA Security Policy Validation and Authoring (work carried out at IBM T.J. Watson Research Center, New York, 2011)

- Anton Korosec: Deploying a Web Service Runtime Environment into the Cloud (2010)
- Klaus Zettler: Planung, Konzeption und Implementierung eines Virtual Campus im Rahmen von S-Cube (2010)
- Waldemar Hummer: Towards a Domain-Specific Language for Defining Intra-Service Protocols of Stateful Web Services (2009)

ACADEMIC JOURNAL PAPERS [\[scholar\]](#)

- B. Varghese, **Philipp Leitner**, S. Ray, K. Chard, A. Barker, Y. Elkhatib, H. Herry, C.H. Hong, J. Singer, F.P. Tso, E. Yoneki, and M.F. Zhani: *CLOUD Futurology*, Computer, 2019. To appear.
- C. Laaber, J. Scheuner, and **P. Leitner**: *Software Microbenchmarking in the Cloud. How Bad is it Really?*, Empirical Software Engineering and Management, 2019. To appear.
- **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, 2018. To appear.
- G. Schermann, J. Cito, **P. Leitner**, U. Zdun, and H. Gall: *We're Doing It Live: A Multi-Method Empirical Study on Continuous Experimentation*, Information and Software Technology, 2018. To appear.
- G. Schermann, J. Cito, and **P. Leitner**: *Continuous Experimentation - Challenges, Implementation Techniques, and Current Research*, IEEE Software, 2018. To appear.
- O. Skarlat, M. Nardelli, S. Schulte, M. Borkowski, and **P. Leitner**: *Resource Provisioning for IoT Services in the Fog*, Service-Oriented Computing and Applications, Springer, 2017. To appear.
- **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.
- 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.
- J. Cito, D. Gotowka, **P. Leitner**, R. Pelette, D. Suljoti, and S. Dustdar: *Identifying Web Performance Degradations through Synthetic and Real-User Monitoring*, Journal of Web Engineering, 2015.
- A. Metzger, **P. Leitner**, D. Ivanovic, E. Schmieders, R. Franklin, M. Carro, S. Dustdar, and K. Pohl: *Comparing and Combining Predictive Business Process Monitoring Techniques*, IEEE Transactions on Systems, Man, and Cybernetics: Systems, vol. 45, no. 2, pp. 276 - 290. 2014.
- C. Inzinger, W. Hummer, B. Satzger, **P. Leitner**, and S. Dustdar: *Generic Event-Based Monitoring and Adaptation Methodology for Heterogeneous Distributed Systems*, Software: Practice and Experience, 2014.
- **P. Leitner**, W. Hummer and S. Dustdar: *Data-Driven and Automated Prediction of Service Level Agreement Violations in Service Compositions*, Distributed and Parallel Databases (Springer), vol. 31, no. 3, pp. 447 - 470. 2013

- W. Hummer, O. Raz, O. Shehory, **P. Leitner**, and S. Dustdar: *Testing of Data-Centric and Event-Based Dynamic Service Compositions*, Software Testing, Verification and Reliability, vol. 23, iss. 6, pp. 465-497, 2013.
- **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
- W. Hummer, **P. Leitner** and S. Dustdar: *SEPL - A Domain-Specific Language and Execution Environment for Protocols of Stateful Web Services*, Distributed and Parallel Databases (DPD), vol. 29, nr. 4, pp. 277-307. 2011, doi:10.1007/s10619-011-7079-6
- B. Wetzstein, **P. Leitner**, F. Rosenberg, S. Dustdar and F. Leymann: *Identifying Influential Factors of Business Process Performance Using Dependency Analysis*, Enterprise Information Systems (EIS), vol. 5, nr. 1. 2011, doi:10.1080/17517575.2010.493956
- A. Michlmayr, F. Rosenberg, **P. Leitner** and S. Dustdar: *End-to-End Support for QoS-Aware Service Selection, Binding and Mediation in VRESCo*, IEEE Transactions on Services Computing (TSC), vol. 3, nr. 3, pp. 193-205. 2010, doi:10.1109/TSC.2010.20
- A. Michlmayr, F. Rosenberg, **P. Leitner** and S. Dustdar: *Selective Service Provenance in the VRESCo Runtime*, International Journal on Web Services Research (JWSR), vol 7, no. 2, pp. 65-86, 2010, doi: 10.4018/jwsr.2010040104
- **P. Leitner**, F. Rosenberg, S. Dustdar, Daios: *Efficient Dynamic Web Service Invocation*, IEEE Internet Computing, vol. 13, no. 3, pp. 72-80, May/June 2009, doi:10.1109/MIC.2009.57

ACADEMIC CONFERENCE PAPERS [\[scholar\]](#)

- J. Cito, **P. Leitner**, M. Rinard, and H. C. Gall: *Interactive Production Performance Feedback in the IDE*, in Proceedings of the 41st ACM/IEEE International Conference on Software Engineering (ICSE). 2019.
- V. Holmqvist, J. Nilsfors, and **P. Leitner**: *Cachematic – Automatic Invalidation in Application-Level Caching Systems*, in Proceedings of the 2019 ACM/SPEC International Conference on Performance Engineering (ICPE) – Industry Track. 2019.
- G. Schermann and **P. Leitner**: *Search-Based Scheduling of Experiments in Continuous Deployment*, in Proceedings of the 34rd IEEE International Conference on Software Maintenance and Evolution (ICSME). 2018.
- C. Laaber and **P. Leitner**: *An Evaluation of Open-Source Software Microbenchmark Suites for Continuous Performance Assessment*, in Proceedings of the 15th International Conference on Mining Software Repositories (MSR), 2018.

- C. Vassallo, G. Schermann, F. Zampetti, D. Romano, **P. Leitner**, A. Zaidman, M. Di Penta, and S. Panichella: *A Tale of CI Build Failures: an Open Source and a Financial Organization Perspective*, in Proceedings of the 33rd IEEE International Conference on Software Maintenance and Evolution (ICSME). 2017
 - G. Mazlamo, J. Cito, and **P. Leitner**: *Extraction of Microservices from Monolithic Software Architectures*, in Proceedings of the 24th IEEE International Conference on Web Services (ICWS) - Applications Track. 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.
 - 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, 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.
- 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**, J. Cito, and E. Stöckli: *Modelling and Managing Deployment Costs of Microservice-Based Cloud Applications*, in Proceedings of the 9th IEEE/ACM International Conference on Utility and Cloud Computing (UCC), 2016.
 - O. Skarlat, S. Schulte, M. Borkowski, and **P. Leitner**: *Resource Provisioning for IoT Services in the Fog*, in Proceedings of the 9th IEEE International Conference on Service Oriented Computing & Applications (SOCA), 2016.
 - **P. Leitner** and J. Scheuner: *Bursting With Possibilities – an Empirical Study of Credit-Based Bursting Cloud Instance Types*, in Proceedings of the 8th IEEE/ACM International Conference on Utility and Cloud Computing (UCC), 2015.
 - E. Salant, **P. Leitner**, K. Wallbom and J. Athes : *A Framework for a Cost-Efficient Cloud Ecosystem*, in eChallenges e-2015 Conference, 2015.

- M. Brandtner, **P. Leitner**, H. C. Gall: *Intent, Tests, and Release Dependencies: Pragmatic Recipes for Source Code Integration*, in Proceedings of the 15th IEEE International Working Conference on Source Code Analysis and Manipulation (SCAM), Bremen, Germany, 2015
 - D. Bruneo, A. Dadashi, **P. Leitner**, B. Moltchanov, F. J. N. De-Santos, A. Miron, E. Salant, A. M. Sharifloo, K. Wallbom, and C. Woods: *CloudWave – Leveraging DevOps for Cloud Management and Application Development*, in Proceedings of the Fourth European Conference on Service-Oriented and Cloud Computing (ESOCC’15) – EU Projects Track, 2015.
- 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**, S. Schulte, and S. Dustdar: *SPEEDL – A Declarative Event-Based Language for Cloud Scaling Definition*, in Proceedings of the Future of Software Engineering For and In Cloud, Visionary Track of IEEE Services, 2015.
 - G. Schermann, M. Brandtner, S. Panichella, **P. Leitner**, and H. Gall: *Discovering Loners and Phantoms in Commit and Issue Data*, in Proceedings of the 23rd IEEE International Conference on Program Comprehension (ICPC 2015), 2015.
 - M. Brandtner, S. C. Müller, **P. Leitner**, and H. Gall: *SQA-Profiles: Rule-Based Activity Profiles for Continuous Integration Environments*, in Proceedings of the 22nd IEEE International Conference on Software Analysis, Evolution, and Reengineering (SANER15), 2015.
 - J. Scheuner, **P. Leitner**, J. Cito, and H. Gall: *Cloud WorkBench - Infrastructure-as-Code Based Cloud Benchmarking*, in Proceedings of the 6th IEEE International Conference on Cloud Computing Technology and Science (CloudCom14), 2014.
 - J. Cito, D. Suljoti, **P. Leitner**, and S. Dustdar: *Identifying Root Causes of Web Performance Degradation using Changepoint Analysis*, in Proceedings of the 14th International Conference on Web Engineering (ICWE 2014), 2014.
 - R. Zabolotnyi, **P. Leitner**, and S. Dustdar: *Profiling-Based Task Scheduling for Factory-Worker Applications in Infrastructure-as-a-Service Clouds*, in Proceedings of the 40th Euromicro Conference on Software Engineering and Advanced Applications (SEAA), 2014.
 - A. H. Borhani, **P. Leitner**, B. Lee, X. Li, and T. Hung: *WPress: Benchmarking Infrastructure-as-a-Service Cloud Computing Systems for On-line Transaction Processing Applications*, in Proceedings of the 18th IEEE International Enterprise Distributed Object Computing Conference (EDOC), 2014.

- C. Inzinger, W. Hummer, I. Lytra, **P. Leitner**, H. Tran, U. Zdun and S. Dustdar: *Decisions, Models, and Monitoring - A Lifecycle Model for the Evolution of Service-Based Systems*, to appear at the 17th IEEE International Enterprise Computing Conference (EDOC'13), 2013
 - C. Inzinger, B. Satzger, **P. Leitner**, W. Hummer, and S. Dustdar: *Position Paper: Model-based Adaptation of Cloud Computing Applications*, in: Proceedings of the International Conference on Model-Driven Engineering and Software Development (MODELSWARD), Special Track on Model-driven Software Adaptation (MODA), 2013
 - C. Inzinger, W. Hummer, B. Satzger, **P. Leitner**, and S. Dustdar: *Identifying Incompatible Service Implementations using Pooled Decision Trees*, in: Proceedings of the 28th Symposium on Applied Computing (SAC), Track on Dependable and Adaptive Distributed Systems, 2013
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