

CV Dr.-Ing. John Erik Wittern - Appendix

Citations

360 (Source: Google Scholar, July 2nd 2019)

Patents (authors in alphabetical order)

1. Fabio Oliveira, Gerald Schermann, **Erik Wittern**: “Topology-Aware Continuous Experimentation of Microservice-based Applications”, IBM, 2018
2. Jim A. Laredo, **Erik Wittern**: “GraphQL Management“, IBM, 2018
3. Alan Cha, Jim A. Laredo, **Erik Wittern**: “Robust, Automatic Generation of Nested GraphQL Interfaces on top of REST(-like) APIs”, IBM, 2018
4. Carlos Andres Alzate-Perez, Charles Arthur Jochim, Alice-Maria Marascu, Radu Marinescu, **Erik Wittern**: “Automated Application Composer from Natural Language Problem Description”, IBM, 2017
5. Jim Laredo, Aleksander Slominski, **Erik Wittern**, Annie Ying, Christopher Young, Yunhui Zheng: “A gray-box test generation approach based on real-world usage”, IBM, 2016
6. Julian Dolby, Jim A. Laredo, Aleksander Slominski, **Erik Wittern**, Annie Ying, Chris Young, Yunhui Zheng: “Automatically running tests against web APIs based on specifications”, IBM, 2016
7. Jim Laredo, Aleksander Slominski, **Erik Wittern**, Annie Ying, Christopher Young, Yunhui Zheng: “An approach to generate lessons learned from code usage”, IBM, 2016
8. Jim Laredo, Aleksander Slominski, **Erik Wittern**, Annie Ying, Christopher Young, Yunhui Zheng: “A probabilistic approach to match web API code usage to specification”, IBM, 2016
9. Salman Baset, Philippe Suter, **Erik Wittern**: “API Recommendation Based on Usage in Serverless (Function as a Service) Systems”, IBM, 2016
10. Julian Dolby, **Erik Wittern**, Jinqiu Yang, Annie Ying: “Generating Web API Specifications from Online Documentation”, IBM, 2016
11. Evelyn Duesterwald, Wei Tan, **Erik Wittern**: “Web API Recommendation with Usage Patterns Derived from the Topic Model”, IBM, 2016
12. Julian Dolby, Jim A. Laredo, **Erik Wittern**, Annie Ying, Yunhui Zheng: “An Analysis to Check Web API Code Usage and Specifications”, IBM, 2016
13. Philippe Suter, **Erik Wittern**: “Inferring Web API Descriptions from Usage Data”, IBM, 2015
14. Vinod Muthusamy, Wei Tan, Fei Wang, **Erik Wittern**: “Web API recommendation with consumer provided content”, IBM, 2015
15. Rong Chang, Vinod Muthusamy, Wei Tan, Fei Wang, **Erik Wittern**: “Network based Service Composition with Variable Distance Measurements”, IBM, 2016
16. Gennaro Cuomo, Hani T. Jamjoom, Jim A. Laredo, Arjun Natarajan, Shriram Rajagopalan, Daniel J. Williams, **Erik Wittern**: “System to Support Developers to Iteratively Refine Requirements for Collections of Web Services”, IBM, 2015
17. Jim A. Laredo, Sriram Rajagopal, Maja Vukovic, **Erik Wittern**: “A system and a method for profile-driven merge of API components based on feature models”, IBM, 2014
18. Jim A. Laredo, Vinod Muthusamy, Aleksander Slominski, Biplav Srivastava, Maja Vukovic, **Erik Wittern**: “A System and a Method for API Ecosystem Analytics”, IBM, 2013
19. Jim A. Laredo, Vinod Muthusamy, Aleksander Slominski, Biplav Srivastava, Maja Vukovic, **Erik Wittern**: “A System and a Method for Continuous API Ecosystem Data Collection”, IBM, 2013
20. Jim A. Laredo, Sriram Rajagopal, Maja Vukovic, **Erik Wittern**: “A system and a method for consumer-driven ToS matchmaking in API Marketplaces using Feature Models”, IBM, 2014
21. Jim A. Laredo, Vinod Muthusamy, Aleksander Slominski, Biplav Srivastava, Maja Vukovic, **Erik Wittern**: “A System and a Method for Analyzing Web APIs”, IBM, 2013

Books

1. David Bermbach, **Erik Wittern**, Stefan Tai: “Cloud Service Benchmarking”, Springer International Publishing, 2017
2. **Erik Wittern**: “Modeling and Selection of Software Service Variants”, KIT Scientific Publishing, 2014

Articles

3. Philipp Leitner, **Erik Wittern**, Josef Spillner, and Waldemar Hummer: “A Mixed-Method Empirical Study of Function-as-a-Service Software Development in Industrial Practice”, Journal of Systems and Software, vol. 149, pp. 340–359, 2019.
4. **Erik Wittern**, Vinod Muthusamy, Jim Laredo, Maja Vukovic, Aleksander Slominski, Sriram Rajagopalan, Hani Jamjoom, Arjun Natarajan: “API Harmony: Graph-based Search and Selection of APIs in the Cloud”, IBM Journal of Research and Development, vol. 60(2-3), IBM, 2016
5. **Erik Wittern**, Christian Zirpins: “Service Feature Modeling: Modeling and Participatory Ranking of Service Design Alternatives”, Software & Systems Modeling, vol. 15 (2), pp. 553-578, 2016
6. Panagiotis Kokkinakos, Sotirios Koussouris, Dimitrios Panopoulos, Dimitrios Askounis, Antonis Ramfos, Christos Georgousopoulos, **Erik Wittern**: “Citizens Collaboration and Co-Creation in Public Service Delivery: The COCKPIT Project”, International Journal of Electronic Government Research (IJEGR), vol. 8 (3), pp. 33-62, IGI Global, 2012

In proceedings

7. Jinqiu Yang, **Erik Wittern**, Annie TT Ying, Julian Dolby, and Lin Tan: “Towards extracting web api specifications from documentation”, 2018 IEEE/ACM 15th International Conference on Mining Software Repositories (MSR), IEEE, 2018, pp. 454–464
8. **Erik Wittern**, Alan Cha, and Jim A Laredo: “Generating GraphQL-Wrappers for REST (-like) APIs”, International Conference on Web Engineering (ICWE), Springer, Cham, pp. 65–83, 2018
9. **Erik Wittern**: “Web APIs - Challenges, Design Points, and Research Opportunities: Invited talk at the 2nd International Workshop on API Usage and Evolution (WAPI '18)”, IEEE/ACM 2nd International Workshop on API Usage and Evolution (WAPI), IEEE, pp. 18–18, 2018
10. Jürgen Cito, Gerald Schermann, **Erik Wittern**, Philipp Leitner, Sali Zumberi, and Harald C Gall: “An Empirical Analysis of the Docker Container Ecosystem on GitHub”, IEEE/ACM 14th International Conference on Mining Software Repositories (MSR), IEEE, pp. 323–333, 2017
11. Marianna Rapoport, Philippe Suter, **Erik Wittern**, Ondrej Lhotak, and Julian Dolby: “Who You Gonna Call?: Analyzing Web Requests in Android Applications”, IEEE/ACM 14th International Conference on Mining Software Repositories (MSR), IEEE, pp. 80–90, 2017
12. **Erik Wittern**, Annie Ying, Yunhui Zheng, Jim A Laredo, Julian Dolby, Christopher C Young, and Aleksander Slominski: “Opportunities in Software Engineering Research for Web API Consumption”, Proceedings of the 1st International Workshop on API Usage and Evolution, IEEE Press, pp. 7–10, 2017
13. **Erik Wittern**, Annie TT Ying, Yunhui Zheng, Julian Dolby, and Jim A Laredo: “Statically Checking Web API Requests in JavaScript”, Proceedings of the 39th International Conference on Software Engineering (ICSE '17), IEEE Press, pp. 244–254, 2017
14. David Bermbach, **Erik Wittern**: “Benchmarking Web API Quality”, International Conference on Web Engineering (ICWE), pp. 188-206, 2016
15. **Erik Wittern**, Philippe Suter, Shriram Rajagopalan: “A Look at the Dynamics of the JavaScript Package Ecosystem”, Proceedings of the 13th International Workshop on Mining Software Repositories (MSR), pp. 351-361, 2016

16. Philippe Suter, **Erik Wittern**: “Inferring Web API Descriptions from Usage Data”, Third IEEE Workshop on Hot Topics in Web Systems and Technologies (HotWeb), IEEE, pp. 7-12, 2015
17. **Erik Wittern**, Alexander Lenk, Sebastian Bartenbach, Tobias Braeuer. “Feature-Based Configuration of Vendor-Independent Deployments on IaaS”, In the proceedings of the IEEE 18th International Enterprise Distributed Object Computing Conference (EDOC), pp. 128-135, IEEE, 2014
18. **Erik Wittern**, Jim Laredo, Maja Vukovic, Vinod Muthusamy, Aleksander Slominski: “A Graph-based Data Model for API Ecosystem Insights”, 21th IEEE International Conference on Web Services (ICWS 2014), IEEE Computer Society, 2014
19. **Erik Wittern**, Robin Fischer: “A Life-Cycle Model for Software Service Engineering”, short paper, Proceedings of the 2nd European Conference on Service-Oriented and Cloud Computing (ESOCC '13), pages 164-171, Springer, LNCS 8135, 2013
20. Gregory Katsaros, **Erik Wittern**, Birgit Gray, Stefan Tai: “A Service Delivery Framework to Support Opportunistic Collaborations”, Proceedings of the 2nd European Conference on Service-Oriented and Cloud Computing (ESOCC '13), pages 4-18, Springer, LNCS 8135, 2013
21. **Erik Wittern**, Nelly Schuster, Jörn Kuhlenkamp, Stefan Tai: “Participatory Service Design through Composed and Coordinated Service Feature Models”, Proceedings of the 10th International Conference on Service Oriented Computing (ICSOC '12), pages 158-172, Springer, LNCS 7636, 2012
22. **Erik Wittern**, Jörn Kuhlenkamp, Michael Menzel: “Cloud Service Selection based on Variability Modeling”, Proceedings of the 10th International Conference on Service Oriented Computing (ICSOC '12), pages 127-141, Springer, LNCS 7636, 2012
23. Robin Fischer, **Erik Wittern**, Julian Schneider, Stefan Tai: “Pattern-based Process Discovery” Proceedings of the IEEE International Conference on Service Oriented Computing & Applications (SOCA), pages 1-8, IEEE Computer Society, 2012
24. **Erik Wittern**, Christian Zirpins: “Validating Service Value Propositions Regarding Stakeholder Preferences”, VAST 2011 - First International Workshop on Variability-intensive Systems Testing, Validation, and Verification, pages 294-297, IEEE Computer Society, 2011
25. **Erik Wittern**, Christian Zirpins, Nidhi Rajshree, Anshu N. Jain, Ilias Spais, Konstantinos Giannakakis “A Tool Suite to Model Service Variability and Resolve It Based on Stakeholder Preferences”, demo paper, In: Service-Oriented Computing - ICSOC 2011 Workshops, pages: 250-251, Springer, LNCS 7221, 2011
26. **Erik Wittern**, Christian Zirpins: “On the Use of Feature Models for Service Design: The Case of Value Representation”, In: Towards a Service-Based Internet. ServiceWave 2010 Workshops, pages 110-118, Springer, LNCS 6569, 2010

Services to the research community

Co-organizer of the 2nd Vienna Software Seminar on “DevOps and Microservice APIs”, August 2019

Co-organizer of the International Workshop on Middleware and Applications for the Internet of Things (M4IoT) in 2017 and 2018

Co-organizer of the First International Workshop on Mashups of Things and APIs (MoTA) in 2016

Provided journal reviews for Transactions on Software Engineering in 2019, IEEE Transactions on Cloud Computing in 2017 and 2018, IEEE Transactions on Services Computing in 2017, IJCIS in 2015, the IBM Journal of Research and Development in 2016, IEEE Cloud Computing Journal in 2016

SC member of the European Conference on Service-Oriented and Cloud Computing (ESOCC) since 2016

PC member & PhD symposium PC member of the European Conference on Service-Oriented and Cloud Computing (ESOCC) since 2015

PC member of the International Conference on Mining Software Repositories (MSR) in 2017, 2018, 2019

PC member of the International Conference on Web Engineering (ICWE) in 2016, 2017, 2018, 2019

PC member for the industry track of the International Conference on Software Maintenance and Evolution (ICSME) in 2019

PC member of the IEEE International Conference on Web Services (ICWS) in 2015

PC member of the IEEE International Conference on Cloud and Big Data Computing (CBDDCom) since 2016

PC member of the WS-REST workshop in 2018

PC member of the International Workshop on API Usage and Evolution (WAPI) workshop in 2018

PC member of the Web of Things (WoT) workshop in 2016

PC member of the Business Process Monitoring and Performance Analysis in the Cloud (CloudBpm) workshop in 2016

PC member of the Special Session on High Performance Services Computing and Internet Technologies (SerCo) at the International Conference on High Performance Computing & Simulation (HPCS) in 2016

PC member of the International Workshop on Engineering Service-Oriented Applications (WESOA) in 2015 and 2016

Reviewer for the International Conference on Business Process Management (BPM) in 2011 (2 papers), 2013 (1 paper), and 2014 (2 papers)

Provided review for a grant application for the Israel Science Foundation in 2018

Provided review for a grant application for the Netherlands Organisation for Scientific Research in 2017

Provided review for a grant application for the Natural Sciences and Engineering Research Council of Canada in 2015