

# Curriculum Vitae

## Personal Information

Name: Sebastian Heil, M.Sc.  
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Date of birth: 17.05.1988

## Education

10/2015 – 02/2020 (est.) Chemnitz University of Technology, PhD

10/2010 – 09/2012 Chemnitz University of Technology, M.Sc.  
Data & Web Engineering

10/2007 – 10/2010 Chemnitz University of Technology, B.Sc.  
Major: Computer Science  
Minor: Physics

## Research Experience

10/2014 – 09/2018 **Researcher** at the Distributed Systems Group (VSR),  
Technische Universität Chemnitz  
eHealth Research Laboratory, education & student  
supervision

11/2013 & 11/2012 **Research Stays** in Argentina at Universidad Nacional  
de La Plata, LIFIA at group of Prof. Gustavo Rossi,  
funded by DAAD project MockupDD (54367460)

10/2012 – 09/2014 **Researcher** at the Distributed Systems Group (VSR),  
Chemnitz University of Technology  
OMELETTE FP7 Project, education & student  
supervision

08/2011 – 02/2012 **Student researcher** at the Distributed Systems Group  
(VSR), Chemnitz University of Technology  
Task: Development of a BPMN-based workflow  
management system with RESTful interface  
Focus: Web services, REST, BPMN, workflow  
visualization, Usability

04/2011 – 08/2011 **Research internship** at the Distributed Systems  
Group (VSR), Chemnitz University of Technology:  
Workflow management with WebComposition/  
DataGridService (Project: Flowble)  
Focus: Web services, Linked Data, BPMN

04/2010 – 12/2010 **Development** of a community-centered web-based  
workflow management system (Project: Goal1)  
Focus: crowdsourcing, collaboration, workflow  
management, microcontent

## Publications

- 09/2019 Heil, S., Bakaev, M., Gaedke, M.: *Assessing Completeness in Training Data for Image-Based Analysis of Web User Interfaces*. In Proceedings of the Young Scientist's Third International Workshop on Trends in Information Processing, Stavropol, Russia.
- 06/2019 Heil, S., Siegert, V., Gaedke, M.: *Crowdsourced Reverse Engineering: Experiences in Applying Crowdsourcing to Concept Assignment*. In Evaluation of Novel Approaches to Software Engineering, Revised Selected Papers, Communications in Computer and Information Science.
- 06/2019 Noura, M., Heil, S., Gaedke, M.: *Webifying Heterogenous Internet of Things Devices*. In Proceedings of 19th International Conference on Web Engineering, Daejeon, Korea.
- 06/2019 Bakaev, M., Heil, S., Perminov, N., Gaedke, M.: *Integration Platform for Metric-Based Analysis of Web User Interfaces*. In Proceedings of 19th International Conference on Web Engineering, Daejeon, Korea.
- 05/2019 Noura, M., Gyrard, A., Heil, S., Gaedke, M.: *Automatic Knowledge Extraction to build Semantic Web of Things Applications*. IEEE Internet of Things Journal.
- 03/2019 Bakaev, M., Heil, S., Khvorostov, V., Gaedke, M.: *Auto-Extraction and Integration of Metrics for Web User Interfaces*. Journal of Web Engineering 17(6&7).
- 10/2018 Noura, M., Gyrard, A., Heil, S., Gaedke, M.: *Concept Extraction from Web of Things Knowledge Bases*. In Proceedings of the 17th International Conference WWW/Interne, Budapest, Hungary. Outstanding Paper Award.
- 06/2018 Bakaev, M., Heil, S., Khvorostov, V., Gaedke, M.: *HCI Vision for Automated Analysis and Mining of Web User Interfaces*. In Proceedings of the 18th International Conference on Web Engineering, Cáceres, Spain.
- 05/2018 Noura, M., Heil, S., Gaedke, M.: *GrOWTH: Goal-Oriented End User Development for Web of Things Devices*. In Proceedings of the 18th International Conference on Web Engineering, Cáceres, Spain.
- 05/2018 Heil, S., Siegert, V., Gaedke, M.: *ReWaMP: Rapid Web Migration Prototyping leveraging WebAssembly*. In Proceedings of the 18th International Conference on Web Engineering, Cáceres, Spain.
- 05/2018 Zarei, B., Heil, S., Gaedke, M.: *Natural-Language-Enabled End-User Tool Endowed with Ontology-based Development*. In Proceedings of the 18th International Conference on Web Engineering, Cáceres, Spain.

- 03/2018 Bakaev, M., Laricheva, T., Heil, S., Gaedke, M.: *Analysis and Prediction of University Websites Perceptions by Different User Groups*. In Proceedings of IEEE 14th Actual problems of electronic instrument engineering, Novosibirsk, Russia.
- 03/2018 Heil, S., Gaedke, M.: *Exploring Crowdsourced Reverse Engineering*. In Proceedings of the 13th International Conference on Evaluation of Novel Approaches to Software Engineering, Santa Cruz, Portugal.
- 09/2017 Bakaev, M., Heil, S., Khvorostov, V., Gaedke, M.: *Evaluation of User-Subjective Web Interface Similarity with Kansei Engineering-Based ANN*. In Proceedings of 3rd International Workshop on Usability and Accessibility focused Requirements Engineering, Lisbon, Portugal.
- 06/2017 Bakaev, M., Khvorostov, V., Heil, S., Gaedke, M.: *Web Intelligence Linked Open Data for Website Design Reuse*. In Proceedings of 17th International Conference on Web Engineering, Rome, Italy.
- 04/2017 Heil, S., Gaedke, M.: *Web Migration - A Survey Considering the SME Perspective*. In Proceedings of the 12th International Conference on Evaluation of Novel Approaches to Software Engineering, Porto, Portugal.
- 12/2016 Heil, S., Wild, S., Krug, M., Gaedke, M.: *Towards Reputation-Aware Expert Finding with Linked Open Data*. In Proceedings of the 12th International Conference on Semantic Systems: Posters and Demos Track, Leipzig, Germany.
- 11/2016 Heil, S., Bakaev, M., Gaedke, M.: *Measuring and Ensuring Similarity of User Interfaces: The Impact of Web Layout*. In Proceedings of the 17th International Conference on Web Information Systems Engineering, Shanghai, China.
- 10/2016 Bakaev, M., Gaedke, M., Heil, S.: *Kansei Engineering Experimental Research with University Websites*. In Chemnitzer Informatik-Berichte, Chemnitz, Germany.
- 06/2016 Bakaev, M., Gaedke, M., Khvorostov, V., Heil, S.: *Extending Kansei Engineering for Requirements Consideration in Web Interaction Design*. In Proceedings of the 16th International Conference on Web Engineering, Lugano, Switzerland.
- 04/2016 Heil, S., Gaedke, M.: *AWSM: Agile Web Migration for SMEs*. In Proceedings of the 11th International Conference on Evaluation of Novel Approaches to Software Engineering, Rome, Italy.
- 04/2016 Bakaev, M., Gaedke, M., Heil, S.: *Kansei Engineering Experimental Research with University Websites*. In Chemnitzer Informatik-Berichte, Technische Universität Chemnitz, Department of Computer Science, 2016.

- 06/2015 Heil, S., Drechsel, M., Gaedke, M.: *Supporting the Development of Team-Climate-Aware Collaborative Web Applications*. In Proceedings of the 15th International Conference on Web Engineering, Rotterdam, Netherlands.
- 03/2015 Wild, S., Wiedemann, F., Heil, S., Tschudnowsky, A., Gaedke, M.: *ProProtect3: An Approach for Protecting User Profile Data from Disclosure, Tampering, and Improper Use in the Context of WebID*. In Transactions on Large-Scale Data- and Knowledge-Centered Systems XIX.
- 07/2014 Heil, S., Wild, S., Gaedke, M.: *CRAWL•E: Distributed Skill Endorsements in Expert Finding*. In Proceedings of the 14th International Conference on Web Engineering, Toulouse, France.
- 07/2014 Rivero, J.M., Heil, S., Grigera, J., Robles Luna, E., Gaedke, M.: *An extensible, Model-Driven and end-user centric approach for API building*. In Proceedings of the 14th International Conference on Web Engineering, Toulouse, France.
- 12/2013 Heil, S., Wild, S., Gaedke, M.: *Collaborative Adaptive Case Management with Linked Data*. In Proceedings of the 23rd International Conference on World Wide Web Companion, Seoul, Korea.
- 12/2013 Wild, S., Chudnovskyy, O., Heil, S., Gaedke, M.: *Protecting User Profile Data in WebID-based Social Networks Through Fine-grained Filtering*. In Current Trends in Web Engineering, Proceedings of ICWE 2013 International Workshops ComposableWeb, QWE, MDWE, DMSSW, EMotions, CSE, SSN, and PhD Symposium, Aalborg, Denmark.
- 07/2013 Rivero, J.M., Heil, S., Grigera, J., Gaedke, M.: *MockAPI: An Agile Approach Supporting API-first Web Application Development*. In Current Trends in Web Engineering, Proceedings of the 13<sup>th</sup> International Conference on Web Engineering (ICWE 2013), Aalborg, Denmark.
- 07/2013 Wild, S., Heil, S., Chudnovskyy, O., Gaedke, M.: *Customized Views on Profiles in WebId-Based Distributed Social Networks*. In Current Trends in Web Engineering, Proceedings of the 13<sup>th</sup> International Conference on Web Engineering (ICWE 2013), Aalborg, Denmark.
- 09/2012 Heil, S.: *Supporting Semantic Interoperability in Inter-Widget-Communication-enabled User Interface Mashups*. Chemnitz University of Technology. Master's thesis, 2012.
- 07/2012 Heil, S., Chudnovskyy, O., Gaedke, M.: *Supporting Semantic Interoperability in Inter-Widget-Communication-enabled User Interface Mashups*.

Chemnitzer Informatik-Berichte (pp. 71-76).  
Chemnitz University of Technology,  
Department of Computer Science, 2012.

10/2010

Heil, S.: *Realisierung eines Microbloggingsystems für ein communitybasiertes Workflowmanagementsystem*.  
Chemnitz University of Technology.  
Bachelor's thesis, 2010.

## **Teaching**

Lecture *Softwareengineering Vertiefung*  
(Advanced Software Engineering)

Tutorial *Cloud & Web Applications*

Tutorial *Current Trends in Web Engineering*

Tutorial *Software Service Engineering*

Tutorial *Rechnernetze* (Computer Networks)

Tutorial *XML*

Seminar *Web Engineering*

Practical Course *Web Engineering*

Practical Course *Software Engineering*

## **Foreign languages**

English (CEFR C1)  
Spanish (CEFR B1)

December 12, 2019