Philip **Heltweg**

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Education

PhD Student
FRIEDRICH-ALEXANDER-UNIVERSITÄT ERLANGEN-NÜRNBERG

Erlangen, Germany
Dec. 2021 - current

- Thesis: Open Collaborative Data Engineering
- Scientific staff at the Professorship for Open-Source Software (Prof. Riehle)

M.Sc. in Practical Computer Science
UNIVERSITY OF HAGEN

Hagen, Germany
Apr. 2020 - Oct. 2021

- Thesis: Implementing a Structured Approach to Belief Revision by Deterministic Switching Between Total Preorders
- Passed with distinction, achieving the best possible grade of 1.0
- Student assistant at the Chair of Knowledge-Based Systems (Prof. Beierle)

B.Sc. in Information Systems
UNIVERSITY OF MÜNSTER

Münster, Germany
2009 - 2012

- Thesis: Social Reading in the Context of Research Publications
- Awarded the Oliver Wyman-AlumniUm-Junior-Award for outstanding students
- Student assistant at the Databases and Information Systems Group (Prof. Vossen)

Work Experience

Scientific Staff
FRIEDRICH-ALEXANDER-UNIVERSITÄT ERLANGEN-NÜRNBERG

Erlangen, Germany
Dec. 2021 - current

- Employed at the Professorship for Open-Source Software
- Working on JValue: Making open data easy, safe, and reliable

Founder
ISSELTHAL INDUSTRIES UG

Raesfeld, Germany
Apr. 2019 - current

- Implementation of own software projects
- Freelance software-engineering and data science consulting

Senior Product Owner
ESL GAMING GMBH

Cologne, Germany
Feb. 2018 - Apr. 2019

- Supervised new products from initial pitch to market entry
- Worked with management and external partners like AT&T, Intel, and Valve Corporation
- Coordinated workload and created visibility across multiple teams
- Planned project budgets

Lead Developer ESL Mobile
ESL GAMING GMBH

Cologne, Germany
Mar. 2015 - Feb. 2018

- Hired developers and designers to establish the mobile development team
- Published two cross-platform apps (ESL Play App, ESL Event App)
  - 100k+ monthly active users
  - Average rating 4*
- Planned software architecture and infrastructure spending
- Led code reviews and 1on1s with team members

Full Stack Software Developer
ESL GAMING GMBH

Cologne, Germany
Jan. 2013 - Mar. 2015

- Transitioned legacy PHP4 platform to API based architecture in Java
- Worked on matchmaking service and tournament system for 9+ million registered users
- Experience in agile/scrum development with multiple releases daily

Research Publications

Articles in Journals

Philip Heltweg and Dirk Riehle. "A Systematic Analysis of Problems in Open Collaborative Data Engineering". In: *Trans. Soc. Comput.* (Oct. 2023). DOI: `10.1145/3629040`.

Articles in Conferences

Philip Heltweg and Dirk Riehle. "Challenges to Open Collaborative Data Engineering". In: *Proceedings of the 56th Hawaii International Conference on System Sciences*. Ed. by Tung X Bui. Hyatt Regency Maui, Jan. 2023, pp. 679–688. DOI: `https://hdl.handle.net/10125/102714`.

Kai Sauerwald and Philip Heltweg. "On Using Model Checking for the Certification of Iterated Belief Changes". In: *Proceedings of the 7th Workshop on Formal and Cognitive Reasoning co-located with the 44th German Conference on Artificial Intelligence (KI 2021), Berlin, Germany, September 28, 2021*. Ed. by Christoph Beierle et al. Vol. 2961. CEUR Workshop Proceedings. CEUR-WS.org, 2021, pp. 23–33. URL: `http://ceur-ws.org/Vol-2961/paper_3.pdf`.

Kai Sauerwald, Philip Heltweg, and Christoph Beierle. "Certification of Iterated Belief Changes via Model Checking and its Implementation". In: *19th International Workshop on Non-Monotonic Reasoning (NMR 2021), Hanoi, Vietnam, November 2-5, 2021, Proceedings*. Ed. by Leila Amgoud and Richard Booth. 2021, pp. 250–254. URL: `https://nmr.cs.tu-dortmund.de/proceedings/NMR2021Proceedings.pdf#page=257`.

Scientific Software

Philip Heltweg. *logic-components*. 2021. DOI: `10.5281/zenodo.4742731`.

Philip Heltweg. *logic-ts*. 2021. DOI: `10.5281/zenodo.5078529`.

Presentations

56th Hawaii International Conference on System Sciences
virtual (Maui)

PRESENTING AUTHOR
January, 2023

- Presented Heltweg and Riehle, "Challenges to Open Collaborative Data Engineering"

19th International Workshop on Non-Monotonic Reasoning
virtual (Hanoi)

PRESENTING AUTHOR
November, 2021

- Presented Sauerwald, Heltweg, and Beierle, "Certification of Iterated Belief Changes via Model Checking and its Implementation"

7th Workshop on Formal and Cognitive Reasoning
virtual (Berlin)

PRESENTING AUTHOR
September, 2021

- Presented Sauerwald and Heltweg, "On Using Model Checking for the Certification of Iterated Belief Changes"