



# Jonas Betzendahl

Learner Modelling ·  
Artificial Intelligence ·  
Science Communication ·

## General

**Born:** 1990  
**Based in:** Bielefeld, Germany  
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**Website:** <https://lambdatotoro.net>

## Occupation

- 2018 – 2026 **Scientific Staff / PhD Candidate**  
Friedrich-Alexander-University Erlangen-Nuremberg  
KWARC group of knowledge representation and management  
Supervisor: Prof. Dr. Michael Kohlhase  
Topic: *Implementation, management and evaluation of all learner modelling systems for the learning platform ALeA*
- Design and implementation of *ZuKoDL*, an application building on the *HisInOne* campus management for easier and quicker reviewing of large numbers of university program applications.  
(Python/Javascript, used by more than 15 study programs at FAU)
- Implementation of *VoLI-KOrN*, an application for easier and decentralised correcting of university exams (Python/Javascript).
- 2016 – 2026 Science Communication in the role of **Science Slammer** (freelance)  
(over 50 appearances explaining scientific research in CS)

## University Education

- 2010 – 2014 **Cognitive Informatics (B.Sc.)** (Bielefeld University)  
Average grade: 1.7 ( $\approx$  3.3 GPA), Thesis topic:  
*“Implementation of Inverse Coupled Rewrite Systems”* (1.0 / A+)
- 2014 – 2018 **Intelligent Systems (M.Sc.)** (Bielefeld University)  
Average grade: 1.3 ( $\approx$  3.7 GPA), Thesis topic:  
*“Translating the IMPS Theory Library to MMT/OmDoc”* (1.6 / B+)

## Teaching Experience

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- 2018 - 2025: Lecture **Computer Science Tools for the Humanities**  
Teaching assistant, coordination, system administration
- 2015 - 2016: Lecture **Advanced Programming in Haskell**  
Design and co-teaching together with Nicole Dresselhaus  
(received the Student Union's "Silver Chalk" award)  
Seminars **Applied Logic 1 & 2** (Substituting for Prof. Peter Ladkin)  
Re-design, co-teaching with Soliman Keshta

## Other Skills

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- Languages:** German (native), English (fluent, last TOEFL 119/120)  
**Programming Languages:** Python, Haskell, Javascript, Rust, Prolog, SML, OCaml, CLISP  
**Operating Systems:** Linux (Debian, Arch, NixOS), Windows, Android, FreeBSD  
**Office Software:** LaTeX, Microsoft Excel / LibreOffice Calc

## Publications

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- [1] Marc Berges et al. "Learning Support Systems based on Mathematical Knowledge Management". In: *Intelligent Computer Mathematics (CICM) 2023*. Ed. by Catherine Dubois and Manfred Kerber. Vol. 14101. LNAI. Springer, 2023. DOI: 978-3-031-42753-4. URL: <http://mathhub.info?a=Papers/23-CICM-Alea&d=paper&l=en>.
- [2] Jonas Betzendahl and Michael Kohlhase. "Translating the IMPS theory library to OM-Doc/MMT". In: *Intelligent Computer Mathematics (CICM) 2018*. Conferences on Intelligent Computer Mathematics. Ed. by Florian Rabe et al. LNAI 11006. Springer, 2018. ISBN: 978-3-319-96811-7. DOI: 10.1007/978-3-319-96812-4. URL: <https://kwarc.info/kohlhase/papers/cicm18-imps.pdf>.
- [3] Jonas Betzendahl, Michael Kohlhase, and Dennis Müller. "Guided Tours in ALeA - Assembling Tailored Educational Dialogues from Semantically Annotated Learning Objects". In: *Artificial Intelligence. ECAI 2023 International Workshops - AI4AI*. Ed. by Slawomir Nowaczyk et al. Vol. 1948. Communications in Computer and Information Science. Springer, 2023, pp. 397-408. DOI: 10.1007/978-3-031-50485-3\_39.
- [4] Jonas Betzendahl et al. "Learning with ALeA: Tailored experiences through annotated course material". In: *Lecture Notes in Informatics*. Gesellschaft für Informatik e.V. (GI), 2023. URL: [https://kwarc.info/people/dmueller/pubs/ws\\_alea\\_voll-ki.pdf](https://kwarc.info/people/dmueller/pubs/ws_alea_voll-ki.pdf).