

Dr. Tim Angelike

Education

- 02/2024 **Dr.rer.nat in Psychology**, Heinrich-Heine-Universität Düsseldorf
Thesis title: Methods for Measuring and Modelling Randomness in Human-Generated Number Sequences
- 07/2023 **B.Sc. Computer Science**, Heinrich-Heine-Universität Düsseldorf
Thesis title: An investigation into algorithmic complexity as a measure of randomness
- 09/2021 **M.Sc. Psychology**, Heinrich-Heine-Universität Düsseldorf
Thesis title: Testing the assumptions of dual process theory: The influence of cognitive load on strategic behavior in rock-paper-scissors
- 07/2019 **B.Sc. Psychology**, Heinrich-Heine-Universität Düsseldorf
Thesis title: An experimental validation of an axiomatically derived scoring rule for the assessment of partial knowledge

Work Experience

- since 10/2025 **Academic Researcher**, Psychological Methods (Prof. Dr. Daniel Heck), Philipps-Universität Marburg
- 10/2021 - 09/2025 **Academic Researcher**, Psychological Assessment and Differential Psychology (Prof. Dr. Jochen Musch), Heinrich-Heine-Universität Düsseldorf
- 09/2024 - 08/2025 **Academic Researcher**, Research Methods, Assessment, and iScience in the department of Psychology (Prof. Dr. Ulf-Dietrich Reips), Universität Konstanz
- 04/2021 - 09/2021 **Student Assistant**, Psychological Assessment and Differential Psychology (Prof. Dr. Jochen Musch), Heinrich-Heine-Universität Düsseldorf
- 10/2017 - 06/2021 **Student Assistant**, General Psychology and Work Psychology (Prof. Dr. Axel Buchner), Heinrich-Heine-Universität Düsseldorf

Scholarship

- 10/2018 - 09/2021 **German National Scholarship [Deutschlandstipendium]**, Heinrich-Heine-Universität Düsseldorf

Skills

Languages	German (native), English (fluent)
Software	R, Stan, Python, PyTorch, JAGS, JavaScript, HTML, CSS, Java, C, L ^A T _E X, Linux, Git

Publications

9. **Angelike, T.**, Diedenhofen, D., & Musch, J. (in press). Experimental validation of an axiomatically derived scoring rule for the assessment of partial knowledge. *Journal of Experimental Education*.
8. **Angelike, T.**, & Heck, D. W. (2026). Evaluating Large Language Models for Feature Extraction from Verbal Stimuli: A Simulation-Based Workflow *PsyArXiv*. https://osf.io/preprints/psyarxiv/xphm9_v1/ [under review]
7. **Angelike, T.**, & Reips, U.-D. (2026). Measurement error is lower for visual analogue scales than for slider scales. *Behavior Research Methods*, 58, 244. <https://doi.org/10.3758/s13428-026-03108-8>
6. Papenberg, M., & **Angelike, T.** (2026). A simulation-based comparison of minimization, rerandomization, and anticlustering for creating experimental conditions. *Methodology*. <https://doi.org/10.5964/meth.17973>
5. **Angelike, T.**, Funke, F., & Reips, U.-D. (2025). *Reducing measurement error by tackling formatting error: Theoretical and empirical evidence for high data quality with visual analogue scales* [under review]
4. **Angelike, T.**, & Musch, J.(2025). *A comparison of algorithmic complexity and entropy for the detection of patterns in short human-generated random sequences* [under review]
3. **Angelike, T.**, & Papenberg, M.(2025). Problems when using anticlustering for the partitioning of cross-validation folds. *OSF*. https://osf.io/preprints/osf/b5fus_v1 [under review]
2. **Angelike, T.**, & Musch, J.(2025). An improved modeling approach to investigate biases in human random number generation. *PLOS ONE*, 20(5), e0324870. <https://doi.org/10.1371/journal.pone.0324870>
1. **Angelike, T.**, & Musch, J.(2024). A comparative evaluation of measures to assess randomness in human-generated sequences. *Behavior Research Methods*, 56(7), 7831-7848. <https://doi.org/10.3758/s13428-024-02456-7>

Software

1. **Angelike, T.** (2022). *randfindR: Analysis of randomness in human-generated sequences*. <https://github.com/TImA97/randfindR>

Talks

8. **Angelike, T.,** & Heck, D. W. (2026). *Evaluating the quality of LLM feature extraction for verbal stimulus materials: A systematic simulation workflow*. Talk at the 54th Meeting of the German Society for Psychology, Luxembourg (Luxembourg).
7. **Angelike, T.,** & Papenberg, M. (2026). *Less but the same? Methods for reducing the size of simulation study designs*. Talk at the 1st Interdisciplinary Symposium on Meta Science for Methods Research, Zürich (Switzerland).
6. Heck, D. W., & **Angelike, T.** (2026). *Evaluating the quality of LLM-generated ratings: A systematic workflow*. Talk at the 1st Interdisciplinary Symposium on Meta Science for Methods Research, Zürich (Switzerland).
5. Reips, U.-D., & **Angelike, T.** (2025). *Visual Analogue Scales versus Slider Scales: Measurement Error*. Talk at the Society for Computation in Psychology (SCiP) during the Psychonomic Society 66th Annual Meeting, Denver (USA).
4. **Angelike, T.,** & Reips, U.-D. (2025). *Theoretical and empirical evidence for high data quality with visual analogue scales*. Talk at the 67th meeting of Experimental Psychologists (TeaP), Frankfurt.
3. **Angelike, T.** (2024). *Methods for measuring and modelling randomness in human generated number sequences*. Invited Talk at department for Research Methods, Assessment, and iScience, Universität Konstanz.
2. **Angelike, T.,** & Musch, J. (2024). *An improved modeling approach to investigate biases in human random number generation*. Talk at the 66th meeting of Experimental Psychologists (TeaP), Regensburg.
1. **Angelike, T.,** Diedenhofen, B., & Musch, J. (2023). *Experimental Validation of a New Axiomatically Derived Scoring Rule for the Subset Selection Response Format*. Talk at the Society for Computation in Psychology (SCiP) during the Psychonomic Society 64th Annual Meeting, San Francisco (USA).

Ad hoc Reviewer

Cognition, Psychological Science, Psychological Methods

Teaching

- 2026 **Seminar**, Introduction to Experimental Design and Critical Reading of Research Papers (B.Sc.), Philipps-Universität Marburg
- 2025-2026 **Seminar**, Statistical Methods (M.Sc.), Philipps-Universität Marburg
- 2025 **Seminar**, Diagnostic Methods (B.Sc.), Heinrich-Heine-Universität Düsseldorf
- 2024-2025 **Seminar**, Introduction to the analysis of human generated random numbers (B.Sc.), Universität Konstanz
- 2021-2024 **Internship**, Laboratory Course in Experimental Research [Experimentalpraktikum] (B.Sc.), Heinrich-Heine-Universität Düsseldorf
- 2022 **Seminar**, Test theory and test construction: Introduction to the programming language R (M.Sc.), Heinrich-Heine-Universität Düsseldorf

Thesis Supervision

4 Master theses and 10 Bachelor theses

Awards

- 2025 **Teaching Award**, Recipient of the EduArt Teaching Award from the Psychology Student Association at the University of Düsseldorf
- 2023 **Teaching Award**, Recipient of the EduArt Teaching Award from the Psychology Student Association at the University of Düsseldorf

Miscellaneous

- 2025-2026 **Faculty Activity**, Task Force on AI: Curriculum & Teaching, Philipps-Universität Marburg
- 10/2018 - 09/2020 **Faculty Activity**, elected student representative in the board of the mathematical and scientific faculty, Heinrich-Heine-Universität Düsseldorf