Gidon T. **Frischkorn**

Data Science · Bayesian Statistics · Psychometrics · R & Python

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Professional Summary

Quantitative psychologist and data scientist with 10+ years of experience designing experiments, building Bayesian measurement models, and turning behavioural data into reproducible, interpretable findings. Secured over CHF 1,000,000 in competitive research funding as PI and led an independent four-person research group. Developed and published the open-source R package bmm (CRAN), now used by researchers across multiple institutions. Translates theoretical questions about human cognition into concrete data products — from experimental paradigm design through Bayesian modelling to documented, shareable code.

Professional Experience

SNF Ambizione Fellow

Zurich, Switzerland

University of Zurich (UZH), Switzerland

01/2023 – present

- Secured and managed CHF 916,510 in competitive SNF funding as PI, leading an independent four-person research group from inception to publication
- Developed and published the bmm R package (CRAN) for Bayesian measurement models — a fully documented, open-source tool adopted across multiple research groups
- Designed and executed multiple experimental studies (lab and online), producing 10+ peer-reviewed publications on cognitive processes and individual differences

Lecturer and Research Associate in Statistics & Methods

Lucerne, Switzerland

University of Lucerne, Switzerland (20% appointment)

08/2025 – 07/2026

- Designed and taught Statistics I and Statistics IV (incl. reproducible data analysis in R) for 150+ undergraduates, with interactive R-based exercise materials built for reproducibility
- Sole responsible instructor for both statistics lectures: design, delivery, accompanying exercises, and examination
- Developed open teaching materials in R and Quarto supporting hands-on statistical training across large cohorts

Postdoctoral Researcher

Zurich, Switzerland

University of Zurich (UZH), Switzerland

01/2019 – 12/2022

- Led international multi-site research projects at the intersection of psychometrics and cognitive psychology, contributing to 15+ peer-reviewed publications
- Secured external network funding (DFG, €44,645 as co-PI) and authored competitive grant applications across two funding cycles
- Advised a research group of 10+ on statistical methodology — Bayesian inference, mixed-effects models, and reproducible analysis pipelines

Key Skills

- **Statistical Modeling:** Bayesian hierarchical models, structural equation models, drift diffusion models, signal detection theory, mixture models
- **Programming & Tools:** R (expert), Python, Git, Quarto, Stan, brms, jsPsych, JATOS
- **Data Science:** Predictive modeling, experimental design, A/B testing, data visualization (ggplot2), reproducible analyses
- **Software Development:** Lead author of bmm R package (published on CRAN; Bayesian measurement models)

Education

Dr. phil. (PhD), Psychology

Heidelberg, Germany

Ruprecht-Karls Universität Heidelberg – With distinction: *summa cum laude*

09/2015 – 03/2019

Master of Science, Psychology

Heidelberg, Germany

Ruprecht-Karls Universität Heidelberg – GPA 1.0 (top grade)

10/2013 – 08/2015

Bachelor of Science, Psychology *Heidelberg, Germany*
Ruprecht-Karls Universität Heidelberg – GPA 1.6 (equivalent: very good) *10/2009 – 08/2012*

Language Skills

German: Native speaker (Swiss German: excellent comprehension)
English: Full professional proficiency, spoken and written (9 years of schooling + 10 years as working language)
French: Basic proficiency (DELF A2 diploma)

Research Funding

Total third-party funding acquired (PI share): > CHF 1,000,000

The binding hypothesis – A unified account of cognitive individual differences? *SNF (CHF 916'510)*
PI | competitive *2023–2026*

Flexibility Grant *SNF (CHF 120'000)*
PI | non-competitive *2023–2026*

Selected Publications

34 peer-reviewed articles | h-index: 16 | citations: > 1000 (OpenAlex)

31. **Frischkorn, G. T.**, & Oberauer, K. (2025). Is the antisaccade task a valid measure of inhibition? *Journal of Experimental Psychology: General*. https://doi.org/10.1037/xge0001808

    Rigorous quantitative validation of a widely-used psychological measure — directly applicable to psychometric tool evaluation and test validity assessment.

28. **Frischkorn, G. T.**, & Popov, V. (2025). A tutorial for estimating Bayesian hierarchical mixture models for visual working memory tasks: Introducing the Bayesian Measurement Modeling (bmm) package for R. *Behavior Research Methods*, *57*(5), 144. https://doi.org/10.3758/s13428-025-02643-0

    Full software documentation cycle: from Bayesian model specification to a published tutorial adopted by applied researchers internationally.

18. **Frischkorn, G. T.**, Wilhelm, O., & Oberauer, K. (2022). Process-oriented intelligence research: A review from the cognitive perspective. *Intelligence*, 94, 101–681. https://doi.org/10.1016/j.intell.2022.101681

16. **Frischkorn, G. T.**, von Bastian, C. C., Souza, A. S., & Oberauer, K. (2022). Individual differences in updating are not related to reasoning ability and working memory capacity. *Journal of Experimental Psychology: General*. https://doi.org/10.1037/xge0001141

    Latent-variable modelling to separate true cognitive signal from measurement artefacts — foundational to building reliable, construct-valid psychometric indicators.

14. **Frischkorn, G. T.**, & Oberauer, K. (2021). Intelligence test items varying in capacity demands cannot be used to test the causality of working memory capacity for fluid intelligence. *Psychonomic Bulletin & Review*. https://doi.org/10/gjp3br

Selected Awards

Nominated for the UZH Mentoring Award
Award for outstanding support and mentoring of doctoral students *2024*

Fellow of the Psychonomic Society
Recognized for outstanding contributions to cognitive psychology and the development of an independent research profile *2024*