Alex Kipnis

Curriculum Vitae

Munich, Germany
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</> adkipnis.github.io

Research Data Scientist working at the intersection of Bayesian inference, hierarchical modeling, and simulation-based machine learning.

Research Experience

Since 2024 — **Ph.D. Student (cont.)**, *Helmholtz Center*, Munich.
Supervised by Dr. Eric Schulz (Human-Centered AI)

2020-2023 — **Ph.D. Student**, *MPI for Biological Cybernetics*, Tübingen.
Supervised by Dr. Eric Schulz (Computational Principles of Intelligence)

2020 — **Staff Associate & Master Thesis**, *Columbia University*, NYC.
Supervised by Prof. Dr. Niko Kriegeskorte (Cognitive Imaging)

2019 — **Research Internship**, *MPI for Human Cognitive and Brain Sciences*, Leipzig.
Supervised by Prof. Dr. Vadim Nikulin (Neural Interactions and Dynamics)

2019–2020 — **Research Internship & Research Assistant**, *LMU Munich*, Munich.
Supervised by Prof. Dr. Paul Sauseng (Biological Psychology)

Education

2021–2022 — **Statistics & Machine Learning (M.Sc.)**, *LMU Munich & Tübingen University*.
42 ECTS (on hold due to stipend), grade: 1.1 (Very Good)

2020–2022 — **Statistics & Computer Science (B.Sc.)**, *LMU Munich*, Munich, Germany.
81 ECTS (not graduated), grade: 1.2 (Very Good)

2018–2020 — **Neuro-Cognitive Psychology (M.Sc.)**, *LMU Munich*.
120 ECTS, grade: 0.9 (Excellent)

2015–2018 — **Psychology (B.Sc.)**, *Heidelberg University*.
180 ECTS, grade: 1.2 (Very Good)

2006–2015 — **Abitur**, *Bismarckgymnasium Elmshorn*.
Grade: 1.0 (Very Good)

Honors and Awards

Since 2022 — **PhD Stipend**, *German Academic Scholarship Foundation (Studienstiftung)*.

2020 — **DAAD Scholarship**, *In cooperation with the LMU Munich (PROSA[LMU])*.
Funding for master thesis research stay at Columbia University

Since 2018 — **Membership**, *Elite network of Bavaria*.
State-run organization for promoting the top-performing students in the state of Bavaria

▬▬▬ Skills

Python	**Fluent**, research-grade package development, data simulation, DL with `PyTorch`.
R	**Advanced**, statistical analysis, data simulation.
LaTeX	**Advanced**, manuscripts, presentations, formal proofs.
BASH	**Intermediate**, shell scripting, automation.

▬▬▬ Languages

German	Mother tongue
Russian	Mother tongue
English	Fluent, C2 level

▬▬▬ Theses

Alex Kipnis (2020). *Validation of new methods in Representational Similarity Analysis*. Master thesis, Ludwig Maximilian University of Munich.

Alex Kipnis (2018). *RIDEing & Drifting: Exploratory analysis of convergent validity of latency jitter corrected and decomposed ERP-measures and Diffusion-Model parameters*. Bachelor thesis, Heidelberg University.

▬▬▬ Papers

Alex Kipnis, Marcel Binz, and Eric Schulz (2025). `metabeta` - A fast neural model for Bayesian mixed-effects regression. *arXiv:2510.07473*. `https://doi.org/10.48550/arXiv.2510.07473`

Alex Kipnis, Konstantinos Voudouris, Luca M. Schulze Buschoff, and Eric Schulz (2025). `metabench` - A sparse benchmark of reasoning and knowledge in Large Language Models. *ICLR 2025*. `https://openreview.net/forum?id=4T33izzFpK`

Marcel Binz, ..., **Alex Kipnis**, ..., and Eric Schulz (2025). A foundation model to predict and capture human cognition. *Nature*. `https://www.nature.com/articles/s41586-025-09215-4`

Heiko Schütt, **Alex Kipnis**, Jörn Diedrichsen, and Nikolaus Kriegeskorte (2023). Statistical inference on representational geometries. *eLife*. `https://doi.org/10.7554/eLife.82566`

▬▬▬ Conference Posters

Alex Kipnis, Konstantinos Voudouris, Luca M. Schulze Buschoff, and Eric Schulz (2025). `metabench` - A sparse benchmark of reasoning and knowledge in Large Language Models. *ICLR 2025*. `https://iclr.cc/media/PosterPDFs/ICLR%202025/31009.png?t=1745250340.3707366`

Alex Kipnis, Anna Lena Biel, and Paul Sauseng (2019). Decoding the neural signal of uncertainty in template matching during visual search. *NCP Day & Poster Symposium, Munich, Germany*

Alex Kipnis and Anna-Lena Schubert (2018). Exploratory analysis of convergence between decomposed ERPs and Drift-Diffusion Model parameters. *7th MindBrainBody Symposium, Berlin, Germany*