Tobias Freidling

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Education

2020 – present	**PhD Mathematics of Information**, University of Cambridge, UK. Supervisor: Qingyuan Zhao
2020	**Exchange Research Student, Informatics**, Kyoto University, Japan. Supervisor: Makoto Yamada
2018 – 2020	**M.Sc. Mathematics**, Technical University of Munich, Germany. Thesis: *Model uncertainty in statistical inference*, Supervisor: Mathias Drton
2017 – 2018	**Visiting Student, The Queen's College**, University of Oxford, UK.
2015 – 2017	**B.Sc. Mathematics**, Ludwig-Maximilians University, Munich, Germany.
2014 – 2015	**B.Sc. Mathematics**, Technical University of Munich, Germany.

Publications

1. **Freidling, Tobias**, Zijun Gao, and Qingyuan Zhao (2023). *Selective Randomization Inference for Adaptive Clinical Trials*. In preparation.

2. **Freidling, Tobias** and Qingyuan Zhao (2022). *Sensitivity Analysis with the R^2-calculus*. 🔗 arXiv: 2301.00040.

3. **Freidling, Tobias**, Benjamin Poignard, Héctor Climente-González, and Makoto Yamada (2021). "Post-selection inference with HSIC-Lasso". In: *International Conference on Machine Learning (ICML)*. Vol. 139, pp. 3439–3448. 🔗 URL: https://proceedings.mlr.press/v139/freidling21a.html.

4. Strieder, David, **Tobias Freidling**, Stefan Haffner, and Mathias Drton (2021). "Confidence in causal discovery with linear causal models". In: *Uncertainty in Artificial Intelligence (UAI)*. Vol. 161, pp. 1217–1226. 🔗 URL: https://proceedings.mlr.press/v161/strieder21a.html.

Presentations and Talks

2023	Statistics Student Seminar, University of Chicago, IL, USA Machine Learning and Data Science Seminar, Okinawa Institute of Science and Technology, Japan European Causal Inference Meeting (EUROCIM), Oslo, Norway Online Causal Inference Seminar
2022	American Causal Inference Conference (ACIC), Berkeley, CA, USA
2021	RIKEN Advanced Intelligence Project (AIP) Seminar International Conference on Machine Learning (ICML) GSK.ai Research Symposium

Professional Service

Reviewer	Biometrika, Artificial Intelligence and Statistics Conference (AISTATS)
Organizer	Causal Inference Reading Group at the University of Cambridge (2022 – present)
Consultant	Statistics Clinic at the University of Cambridge (2020 – present)

Prizes and Scholarships

2023	Smith-Knight and Rayleigh-Knight Prize (Group 3)
2020 – 2024	GSK PhD Studentship
2014/5 – 2020	Scholarship of the German Academic Scholarship Foundation
	Max Weber Scholarship of the Elite Network of Bavaria
	Scholarship of the Maximilianeum Foundation

Teaching

University of Cambridge

Teaching Assistant	2022 – Causal Inference (4th year course)	
	2021 – Causal Inference (4th year course)	
Supervisor	2023 – Statistical Modelling (3rd year course)	
	2023 – Statistics (2nd year course)	
	2022 – Mathematics of Machine Learning (3rd year course)	

Ludwig-Maximilians University

Tutor	2016 – Numerics (2nd year course)

Industry Experience

2023	**GlaxoSmithKline, AIML, Precision Oncology**, Student Placement. Bayesian modelling of pairwise CRISPR knock-out experiments
2021	**Unilever, SEAC**, Industry Project. Optimal Bayesian experimental design of clinical studies for PBPK models
2019 – 2020	**Siemens, Learning Systems**, Working Student. Implementation of Recurrent Neural Networks in Tensorflow
2018	**Gestafe**, Data Science Internship. Business Intelligence for an insurtech start-up

Skills

Coding	R (proficient)	Python (intermediate)	Stan (intermediate)
	LaTeX (proficient)	git (basic+)	
	SQL (basic)	Java (basic)	
Languages	German (native)	English (fluent)	French (intermediate-)
	Spanish (intermediate-)	Japanese (beginner+)	