

Unai Fischer Abaigar

SUMMARY	Ph.D. Candidate in Statistics, LMU Munich unaifischerabaigar.com	Unai.FischerAbaigar@stat.uni-muenchen.de LinkedIn , Google Scholar
EDUCATION	University of Munich (LMU) , Munich, Germany Ph.D. in Statistics	October 2022 -
	<ul style="list-style-type: none">Advisors: Frauke Kreuter, Christoph KernAffiliated researcher at the Munich Center for Machine Learning	
	Ruprecht Karl University of Heidelberg , Heidelberg, Germany M.Sc. in Physics, German Grade: 1.0 (US GPA: 4.00)	March 2022
	<ul style="list-style-type: none">Thesis: <i>Modeling Ordinal Mobile Data with Sequential Variational Autoencoders</i>Dynamical systems, networks, and statistical machine learning for time series	
	B.Sc. in Physics	February 2020
	<ul style="list-style-type: none">Thesis: <i>Modeling the Evolution of Cooperation through Indirect Reciprocity</i>	
	Leibniz Kolleg, University of Tübingen , Tübingen, Germany One year liberal arts program	July 2016
SELECTED RESEARCH EXPERIENCE	Massachusetts Institute of Technology (MIT) , Cambridge, MA, USA <i>Visiting Researcher (upcoming)</i>	Feb 2026 – Mar 2026
	<ul style="list-style-type: none">Hosted by Sendhil Mullainathan and Juan Carlos Perdomo	
	German Institute for Employment Research , Nürnberg, Germany <i>Guest Researcher</i>	Sep 2025 -
	<ul style="list-style-type: none">Designing algorithmic system for fast-tracking high-risk job seekers to specialized counseling teamsCollaborating with agency stakeholders to translate research methods into operational tools	
	Harvard University , Cambridge, MA, USA <i>Fellow</i>	Sep 2024 - Dec 2024
	<ul style="list-style-type: none">Hosted by Cynthia Dwork and Juan Carlos PerdomoApplied ML to identify high-risk populations in large-scale administrative data (>60M job seeker records), examining when prediction improves targeting in public resource allocation	
	Data Science Lab, Hertie School , Berlin, Germany <i>Research Associate</i>	May 2022 - July 2022
	<ul style="list-style-type: none">Hosted by Slava Jankin and Lynn KaackIdentified future avenues for applying machine learning methods in government	
	Central Institute of Mental Health , Mannheim, Germany <i>Research Assistant at Living Lab AI4U</i>	Mar 2022 - Oct 2022
	<ul style="list-style-type: none">Developed generative RNN models to predict emotional trajectories from mobile phone time series data in order to recommend personalized mental health interventionsManaged technical work, coordinating with public mental health specialists, school psychologists and software developers	
	Data Lab/AI, sovanta AG , Heidelberg, Germany <i>Student Trainee</i>	May 2019 - May 2020
	<ul style="list-style-type: none">Worked on ML for financial allocation in clinical research of a top pharmaceutical company	

HONORS AND AWARDS	LMU-NYU Research Cooperation Program	August 2025
	<ul style="list-style-type: none"> Funding awarded for the project <i>Foundations of Statistical Prediction in the Public Sphere</i> (~€10,000) 	
	ICML 2025 Outstanding Paper Award	Jul 2025
	<ul style="list-style-type: none"> Only six main track papers at this year's conference were chosen for this recognition. <i>Media Coverage: NYU Center for Data Science, Podcast Interview</i> 	
	Konrad Zuse School for Excellence in Reliable AI	May 2023 -
SELECTED PUBLICATIONS	<ul style="list-style-type: none"> Selected for advanced training and funding program with the aim of training AI experts with a dual focus on technical brilliance and AI's implications for society 	
	German Academic Scholarship Foundation (Studienstiftung)	Oct 2016 - Mar 2020
	<ul style="list-style-type: none"> Awarded to fewer than 0.5% of German students for exceptional academic abilities and societal contributions; Germany's oldest and most prestigious scholarship program 	
	Fischer-Abaigar, U., C. Kern, and J. C. Perdomo (2025). "The Value of Prediction in Identifying the Worst-Off". In: <i>Proceedings of the 42nd International Conference on Machine Learning (ICML)</i> . Oral Presentation @ ICML 2025, Highlight Track @ FORC 2025.	
	Kern, C., U. Fischer-Abaigar , J. Schweisthal, D. Frauen, R. Ghani, S. Feuerriegel, M. van der Schaar, and F. Kreuter (2025). "Algorithms for reliable decision-making need causal reasoning". In: <i>Nature Computational Science</i> . ISSN: 2662-8457. DOI: 10.1038/s43588-025-00814-9 .	
SELECTED TALKS	Fischer-Abaigar, U., C. Kern, N. Barda, and F. Kreuter (2024). "Bridging the gap: Towards an expanded toolkit for AI-driven decision-making in the public sector". In: <i>Government Information Quarterly</i> 41.4, p. 101976. ISSN: 0740-624X. DOI: https://doi.org/10.1016/j.giq.2024.101976 .	
	<i>The Value of Prediction in Identifying the Worst-Off</i> , ICML 2025 (Oral), Vancouver	July 2025
	<i>Universal Adaptability</i> , ITACOSM 2025, University of Bologna, Italy	July 2025
	<i>The Value of Prediction in Identifying the Worst-Off</i> , FORC 2025, Stanford University	June 2025
	<i>The Value of Prediction in Identifying the Worst-Off</i> , Social Foundations of Computation, Max Planck Institute for Intelligent Systems, Tübingen, Germany	May 2025
	<i>Algorithmic Decision-Making in the Public Sector</i> , Theory of Computation Graduate Student Seminar, Harvard University	Oct 2024
	<i>Introduction to Automated Decision-Making</i> , Coleridge Initiative, UMD, Virtual	Oct 2024
TEACHING EXPERIENCE	University of Munich (LMU), Munich, Germany	
	<i>Co-Instructor</i>	
	<i>Advanced Methods in Social Statistics and Social Data Science</i> , Graduate Course	Summer 2024, 2025
	<i>Computational Social Science</i> , Graduate Course	Winter 2022, 2023, 2025
	<i>Machine Learning meets Causality</i> , Graduate Seminar	Winter 2023
	Ruprecht Karl University of Heidelberg, Heidelberg, Germany	
	<i>Graduate Assistant</i>	
OUTREACH	<i>Machine Learning for Real-World Challenges</i> , Graduate Seminar	Summer 2022
	<i>Dynamical Systems Theory in Machine Learning</i> , Graduate Course	Winter 2021
	Data Science for Social Good Munich	Nov 2022 - July 2024
	<i>Project Management</i>	
	<ul style="list-style-type: none"> Co-organizer of a yearly two month paid fellowship program where aspiring data scientist work on real-world machine learning problems for the social good 	
	DataFest Germany 2023	April 2023
	<i>Organizational Team Member</i>	
	<ul style="list-style-type: none"> Co-organized a data analysis hackathon 	