

# Unai Fischer Abaigar

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

HONORS AND AWARDS	<b>LMU-NYU Research Cooperation Program</b>	August 2025
	• Funding awarded for the project <i>Foundations of Statistical Prediction in the Public Sphere</i> (~€10,000)	
	<b>ICML 2025 Outstanding Paper Award</b>	Jul 2025
	• 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>	
	<b>Konrad Zuse School for Excellence in Reliable AI</b>	May 2023 -
	• 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	
	<b>German Academic Scholarship Foundation (Studienstiftung)</b>	Oct 2016 - Mar 2020
	• Awarded to fewer than 0.5% of German students for exceptional academic abilities and societal contributions; Germany's oldest and most prestigious scholarship program	
SELECTED PUBLICATIONS	<b>Fischer-Abaigar, U.</b> , 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., <b>U. Fischer-Abaigar</b> , 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: <a href="https://doi.org/10.1038/s43588-025-00814-9">10.1038/s43588-025-00814-9</a> .	
	<b>Fischer-Abaigar, U.</b> , 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: <a href="https://doi.org/10.1016/j.giq.2024.101976">https://doi.org/10.1016/j.giq.2024.101976</a> .	
SELECTED TALKS	<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	<b>University of Munich (LMU)</b> , 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
	<b>Ruprecht Karl University of Heidelberg</b> , Heidelberg, Germany	
	<i>Graduate Assistant</i>	
	<i>Machine Learning for Real-World Challenges</i> , Graduate Seminar	Summer 2022
	<i>Dynamical Systems Theory in Machine Learning</i> , Graduate Course	Winter 2021
OUTREACH	<b>Data Science for Social Good Munich</b>	Nov 2022 - July 2024
	<i>Project Management</i>	
	• 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	
	<b>DataFest Germany 2023</b>	April 2023
	<i>Organizational Team Member</i>	
	• Co-organized a data analysis hackathon	