FABIAN ROEBEN

Ph.D. Candidate in Economics | University of Cologne

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RESEARCH INTERESTS

Fields: Applied AI, Behavioral Economics, Political Economy, Media Economics

Methods: Machine Learning, NLP, Survey Experiments, Developing Mobile Apps for Field Experiments

REFERENCES

Prof. Christopher Roth, Ph.D.	Prof. Tom Zimmermann, Ph.D.	Prof. Ingar Haaland, Ph.D.
University of Cologne	University of Cologne	Norwegian School of Economics
roth@wiso.uni-koeln.de	tom.zimmermann@uni-koeln.de	ingar.haaland@nhh.no

EDUCATION

2020-	Ph.D. Economics, University of Cologne Supervisors: Christopher Roth and Tom Zimmermann	Cologne, Germany
2019-2020	M.A. Philosophy, University College London	London, U.K.
2017-2019	M.Sc. Finance, Stockholm School of Economics	Stockholm, Sweden
2013-2017	B.Sc. International Business, Maastricht University Visiting student, Tecnológico de Monterrey (ITESM), 5 months	Maastricht, Netherlands Guadalajara, Mexico

AFFILIATIONS

2025-	Member, Center for Social and Economic Behavior (C-SEB)	Cologne, Germany
2024-	Member, Gateway, Excellence Start-up Center at University of Cologne	Cologne, Germany
2021-	Associated Member, ECONtribute: Markets & Public Policy	Cologne, Germany

RESEARCH

Working Papers

"News Customization with AI" (with Felix Chopra, Ingar Haaland, Christopher Roth & Vanessa Sticher)

Summary: In large-scale field experiments with a custom-built AI news app that lets participants customize article language, we find that customization leads to a better match between news consumption and stated preferences.

Selected Work in Progress

"Macroeconomic Expectations and Household Types: Evidence from Panel Data"

Summary: Using panel data, I cluster 11,302 households by their joint macro-expectations and show that the resulting 'types' exhibit different consumption responses to higher inflation expectations.

"The Asymmetric Response to Political Spin" (with Felix Chopra, Ingar Haaland, Christopher Roth & Vanessa Sticher)

Summary: In a field experiment with an AI news app, we vary the political spin of constant underlying news events to estimate effects of aligned and misaligned spin on consumption and polarization.

"How Far Do Latent Traits Travel?"

Summary: In a panel of 2,058 U.S. adults, I show that a small set of stable, interpretable latent traits explains most of the predictable variation in economic and social behavior, performing similar to richer ML and LLM-based "digital twin" models, while leaving substantial variation unexplained in political and evaluative domains.

"De-biasing Discovery: Algorithms to Uncover Missed Opportunities"

Summary: Trained on a global corpus linking 3.5M AI papers to 2.4M AI-related patents, I build an ML model to predict what papers translate into patents and use the residuals to map systematic 'missing translations.'

ACADEMIC ACTIVITIES

Conferences & Summer Schools

CESifo-TransforM Workshop on the Economic and Societal Impacts of AI (CESifo); 8th Economics of Media Bias Workshop (Frankfurt School of Finance Management); Economics of AI Conference (IESE Business School); ECONtribute Young Economist Workshop (University of Cologne Cologne); Bonn-Frankfurt-Mannheim PhD Conference (Goethe University); YEP Seminar (University of Cologne); IMPRS MPI Summer School (Max Planck Institute); Experimental Finance Summer School (University of Bonn)

Research Visits

2025	Norwegian School of Economics, FAIR (Host: Ingar Haaland), 1 week	Bergen, Norway
2024	Norwegian School of Economics, FAIR (Host: Ingar Haaland), 2 weeks	Bergen, Norway
2023	International Monetary Fund, FIP (Host: Niamh Sheridan), 3 months	Washington D.C., U.S.

Refereeing

Journal of the European Economic Association

Departmental Service

2021-2023	Co-organizer, ECONtribute Young Economist Workshop, annually	

WORK EXPERIENCE

Teaching

2024-	Lecturer, Survey Design, graduate	Cologne, Germany
2022-	Lecturer, Experimental Methods, graduate	Cologne, Germany
2022-	Thesis supervisor, Economics, 4 x graduate	Cologne, Germany
2024	Lecturer, Applied Econometrics, undergraduate	Cologne, Germany
2018	Teaching assistant, Corporate Finance, graduate	Stockholm, Sweden
2015	Tutor, Finance I, undergraduate	Maastricht, Netherlands

Pre-PhD Industry

2018-2019	Analyst, IK Partners (private equity), 8 months, part-time	Stockholm, Sweden
2018	Summer Trainee, Kearney (consulting), 2 months	Berlin, Germany
2017	Finance Intern, Rocket Internet (venture capital), 6 months	Berlin, Germany
2015	Controlling Intern, Deutsche Telekom (telecommunications), 4 months	Bonn, Germany

VOLUNTARY WORK

2018-2019	Student Ambassador, Stockholm School of Economics	Stockholm, Sweden
2017-2019	Event Manager, Study Association (SASSE)	Stockholm, Sweden
2014-2015	Treasurer, Study Association (SCOPE)	Maastricht, Netherlands

MISCELLANEOUS

Analysis	Python, R, SQL, EViews, SPSS, Excel
ML/LLMs	PyTorch, Huggingface, DSPy (programmatic prompting and prompt optimization), RAG
Tools	Git, LaTeX, Jupyter, Markdown, JavaScript/TypeScript, React Native, AWS, Docker
Languages	Fluent German and English, Conversational Spanish, Basic Dutch and Swedish
Personal	German citizen; born 17/04/1994 in Cologne, Germany; one child (born 06/2025)