

Dr Tim Müller

Data Scientist and Social Researcher

I combine over a decade of experience in social research with expertise in quantitative analysis and data science methods (Python, R, SQL). Proficient in Tableau and Google Looker Studio, I design dashboards and data visualisations that support data-driven decision-making. I have led national and international projects, securing funding and applying techniques such as A/B testing to evaluate behavioural patterns. As a versatile problem solver, I specialise in turning complex data into actionable insights, leading interdisciplinary teams, and effectively communicating results to diverse audiences, including policymakers and stakeholders.

Personal Information

Name: Tim Sven Müller

Date of Birth: February 9, 1983, in Helmstedt

Nationality: German



[Homepage](#) [LinkedIn](#) [GitHub](#)

Professional Experience

- Since 07/2024 **Freelance Data Analyst and Data Scientist**
- Specializing in Machine Learning (Python: NumPy, Pandas, Scikit-Learn; TensorFlow: Keras) and PostgreSQL.
 - Gained proficiency in data visualisation tools (Tableau, Google Looker Studio).
- 07/2019 – 06/2024 **Humboldt University of Berlin, BIM (Berlin Institute for Empirical Integration and Migration Research)**
Research Group Leader
- Oversaw the junior research groups “Radicalization in Adolescence” (completed in 2022) and “Migration and Welfare State” (10 team members).
 - Developed and validated prevention methods (online experiments, video materials); modelled migration flows (network models); simulated migration budget impacts (GETTSIM/Python); conducted media analyses (R).
 - Responsible for securing third-party funding (€1.5 million), budget management, team leadership, and advising policymakers.
 - Presented findings to stakeholders and the public.
- 01/2017 – 06/2019 **Research Associate (Postdoc)**
- Research Project: “Refugee Families in Germany (GeFam)” – Developed concepts for labour market integration and quantitatively evaluated language courses for refugees.
 - Conducted advanced analyses (instrumental variables, Difference-in-Differences, Fixed Effects).
 - Presented results to academic audiences, policymakers, and administrators; served as an expert in the National Integration Plan (NAP-I) of the German Federal Government.
 - Delivered teaching and contributed to publishing activities.
- 01/2016 – 04/2017 **Expert Council of German Foundations on Integration and Migration, Research Unit**
Research Associate (Postdoc)
- Research Project: “Teacher Actions and Student Performance” – Developed and validated an intervention to improve academic performance among adolescents with a migration background (800 participants, 14 schools).
 - Responsible for research design, securing third-party funding, fieldwork coordination, and personnel planning.
 - Conducted data analysis and visualisation (Stata, R, Excel): ANOVA, multilevel models.
 - Presented findings to public audiences, trained teachers, and authored academic publications and reports.
- 11/2015 – 12/2016 **Humboldt University of Berlin, BIM (Berlin Institute for Empirical Integration and Migration Research)**

Research Associate (Postdoc)

- Research Project: “Educational Attainment and Migration” – Examined teacher influence on the academic success of adolescents with a migration background and regional attitudes of teachers.
- Coordinated the project, served as acting leader, and secured third-party funding.
- Conducted independent analyses (Stata, R, Excel).
- Communicated results, trained teachers, managed stakeholders and advised local policymakers.
- Authored academic publications and reports.

05/2013 – 10/2015

Institute for Futures Studies, Stockholm & Institute for Analytical Sociology, Linköping University Research Associate (Postdoc)

- Research Project: “Residential Segregation Dynamics” – Modelled and analysed migration patterns in urban areas; developed guidelines to reduce socio-spatial segregation; analysed political attitudes toward migration.
- Conducted large-scale data analyses (population register, N=9M) using advanced methods (SQL, Python, Stata, R, ERGM network analysis).
- Designed experiments and A/B tests for online surveys.
- Authored publications and delivered presentations.

06/2012 – 04/2013

Humboldt University of Berlin, Institute of Social Sciences Research Associate (Postdoc)

- Research Project: “JUNITED” – Analysed public attitudes toward migration and integration opportunities (national and regional).
- Led quantitative data analysis, including independent evaluations (Stata, Excel).
- Conceptualised the survey design (N=8000) and study framework (survey experiments, avoidance of social desirability bias).
- Secured third-party funding and presented findings to the public through media engagements.

Education and Academic Background

10/2008 – 08/2013

University of Oxford, Nuffield College
Doctor of Philosophy (PhD) in Sociology.

10/2003 – 06/2008

University of Mannheim
Diploma (equivalent to MA) in Social Sciences with specialisations in Sociology, Social Psychology, and Empirical Social Research Methods; additional focus on Work and Organisational Psychology.

1995 – 2002

Anna-Sophianeum High School, Schöningen
General University Entrance Qualification (Abitur).

Skills and Expertise

- *Applied Research:* Migration and integration, political radicalisation, labour market and welfare state, religion.
- *Methodological Expertise:* Quantitative social research, questionnaire design, experimental designs (online/field experiments), causal inference, OLS, multilevel analysis, panel data analysis, discrete choice models, and network analysis.
- *Data Analysis and Tools:* Python (Pandas, NumPy, Scikit-Learn, Matplotlib, Seaborn), R, Stata, PostgreSQL; Data Visualization with Tableau and Google Looker Studio; advanced network analysis using MPNet and SIENA; Microsoft Office, Google Workspace. Certified in Data Science, Data Analysis, and Data Visualization (Dataquest.io; Google Cloud Platform).
- *Language Skills:* English (C2, fluent), Swedish (A1).

Engagement in Academic Committees and Other Initiatives

09/2019 – 06/2024

Representative of mid-level academic staff in the council of BIM, Humboldt University of Berlin; played a key role in strategic decision-making and institutional development.

07/2019 – 05/2024

Member of the editorial board of the digital magazine Hedgefox; responsible for articles on migration and integration.

10/2008 – 02/2013

Student representative, Nuffield College, University of Oxford; represented student interests and contributed to governance at the college level.