Dr Tim Müller

Data Scientist and Social Researcher

I combine over a decade of experience in social research (sociology, social psychology) with a strong focus on quantitative analysis and data science methods (Python, R, SQL). My expertise lies in designing, securing funding for, and leading national and international projects that address complex challenges, such as migration, integration, and social dynamics. As a versatile problem solver, I specialise in transforming data into actionable insights, successfully managing

interdisciplinary teams, and 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.
- Ongoing professional development 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; advanced
 network analysis using MPNet and SIENA; Microsoft Office, Google Workspace. Earned certification in Data Science
 and Data Analysis (Dataquest.io).
- 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.