Arun Frey

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Profile

As a computational sociologist and data scientist, I am passionate about using data to bring new evidence to bear on urgent social problems. My research works towards improving immigrant integration, combating inequality, and reducing xenophobic violence.

RESEARCH INTERESTS

Computational Social Science \diamond Causal Inference \diamond Violence \diamond Migration \diamond Inequality

Positions

Stanford RegLab, Stanford University

Data Scientist

2023–Present

Leverhulme Centre for Demographic Science, University of Oxford 2021–2023

Data Science for Social Good Fellowship, Carnegie Mellon University

Postdoctoral Researcher

Nuffield College, University of Oxford

2021 - 2023

Nonstipendiary Research Fellow

VISITING POSITIONS

The Alan Turing Institute

Winter 2022

Data Study Group Fellow

Data Science Fellow

Summer 2022

2020 - 2021

Harvard University

EDUCATION

University of Oxford

2017 - 2021

DPhil Sociology

Visiting Fellow

University of Oxford

2014 - 2015

MSc Sociology

Publications

"On the effect of the New Year's Eve sexual assaults on anti-refugee violence: A rejoinder to Schwitter and Liebe (2023)", European Sociological Review, 2023.

"Nowcasting daily population displacement in Ukraine through social media advertising data", *Population and Development Review*, 2023 (with Douglas R. Leasure, Ridhi Kashyap, Francesco Rampazzo, Claire Dooley, Benjamin Elbers, Maksym Bondarenko, Mark D. Verhagen, Jiani Yan, Evelina Akimova, Masoomali Fatehkia, Robert Trigwell, Andrew J Tatem, Ingmar Weber, and Melinda C. Mills).

"Learning loss due to school closures during the COVID-19 pandemic," *Proceedings of the National Academy of Sciences*, 2021 (with Per Engzell and Mark Verhagen).

PUBLICATIONS	"Faces in the Crowd: Estimating Protest Ideology with Twitter Data," <i>PLOS</i>	_		
(continued)	(with Christopher Barrie).	•		
	"The impact of mass shootings on attitudes towards gun restrictions in the United States," Socius, 2021 (with David S. Kirk).			
	"Getting Under the Skin: The Impact of Terrorist Attacks on Native and Imment," Social Forces, 2021.	nigrant Senti-		
	"Cologne Changed Everything—The Effect of Threatening Events on the Frequency and Distribution of Intergroup Conflict in Germany", <i>European Sociological Review</i> , 2020.			
Working Papers	"Inequalities in Healthcare Use during the COVID-19 Pandemic", $\textit{medRxiv}$, 2023 (with Mark Verhagen and Andrea Tilstra).			
	Minimizing entry into homelessness following eviction through predictive modelling", <i>Working Paper</i> , 2022 (with Catalina Vajiac, Joachim Baumann, Abigail Smith, Kasun Amarasinghe, Alice Lai, Rayid Ghani, and Kit Rodolfa).			
	"Shelter in Place: The impact of refugee shelter openings on local property prices and perceptions of neighbourhood quality", Working Paper, 2022.			
Media Coverage	Research covered by The Economist, Financial Times, The New York Times, New York Magazine, Washington Post, Newsweek, Politico, New Statesman, The Telegraph, The Spectator, The Hill, Times Higher Education, Aljazeera, Der Spiegel, El País, Le Soir, de Volkskrant, Sydney Morning Herald, Irish Examiner, Haaretz, and The Hindu.			
Awards & Grants	Research Grant on COVID-19 Excess Mortality ($\mathfrak{C}50,000$) Ministry of Health of The Netherlands	2023		
	Cozzarelli Prize in recognition of outstanding scientific quality $\mathcal E$ originality National Academy of Sciences of the United States of America	2021		
	2021 Best Article Award, European Consortium for Sociological Research	2021		
	Excellence in Impact Award for data-driven policy interventions, O2RB	2021		
	Graduate Scholarship, Department of Sociology, University of Oxford	2019		
	Graduate Scholarship, St Catherine's College, University of Oxford	2018		
	Quantitative Methods Scholarship, Oxford Q-Step Centre	2018		
	Doctoral Scholarship, German Academic Scholarship Foundation	2018-2021		
	Advanced Quantitative Methods DTP Award, UK ESRC	2017-2021		
	Doctoral Scholarship, Foundation of German Business	2017-2018		
	Travel Grant, German Academic Exchange Service	2016		
TEACHING	Instructor of "Introduction to coding in R" Department of Sociology, University of Oxford	2021-2023		
	Instructor of "Applied Statistics—Political Analysis II" Department of Politics and International Relations, University of Oxford	2017–2020		

Teaching (continued)	_	ssistant of "Applied Statistics for Social Scientists" of Sociology, University of Oxford	2017–2019		
	_	for of "Political Sociology and Social Movement Studies" 's College, University of Oxford	2018–2019		
Languages	Computer	R (e.g. tidyverse, data.table, ggplot2, caret) Python (e.g. numpy, pandas, scikit-learn, tensorflow) SQL, Git, Stata, LATEX.			
	Human	German (native), English (fluent), French (conversational).			
METHODS TRAINING	Applied Machine Learning, Oxford Internet Institute, 2022.				
	Machine Learning for Economists, University of Oxford, 2018, 2022.				
	Summer Institute in Computational Social Science (SICSS), 2020.				
	Advanced Methods for Social Media & Textual Data, Essex Summer School, 2020.				
	Advanced Quantitative Research, Harvard University, 2019.				
Popular Writing (selected)	"Die Bildungskonsequenzen der COVID-19-Pandemie: Erhebliche Lernverluste und wachsende Ungleichheiten," <i>Population Europe Discussion Paper</i> .				
	"The collateral damage to children's education during lockdown," \textit{VoxEU} .				
	"How Do School Closures Affect Student Learning? It's Worse Than You Think," <i>Population Europe</i> .				
	"Inequality of Opportunity in Asia and the Pacific: Clean Energy," <i>United Nations Policy Report</i> .				
Advisory work (recent)	External Co	onsultant ns Secretariat	2023		
	Data Science Fund for Gua	ce Advisor aranteed Income (F4GI)	2022		
		tist & Research Consultant Finance, Government of the Netherlands	2021		
	Expert Adv Ministry of E	visor Education, Culture, and Science, Government of the Netherlands	2021		
	Expert Adv	visor for Education, Open Innovation Team, UK Government	2021		
	Freelance C Max Planck	Consultant Institute for Demographic Research	2021		
Work Experience	Apadana C Data Science	,	2020–Present		
		ions, Bangkok, Thailand	2015-2017		

Economic Affairs Consultant

Invited Talks (recent)	"Minimizing entry into homelessness following eviction" Chair of Statistics and Data Science, LMU Munich	Aug 02, 2023
	" Learning Loss during the COVID-19 pandemic" MZES Mannheim Zentrum für Europäische Sozialforschung	Oct 18, 2022
	"Controlling COVID-19 in Schools: Lessons Learned and Open Questions" Isaac Newton Institute for Mathematical Sciences, Cambridge	Apr 27, 2022
	"The Impact of Refugee Shelters on Neighbourhood Appeal" Institute for Employment Research	Feb 24, 2022
	"Migration and Diversity Speaker Series" WZB Berlin Social Science Center	Nov 10, 2021
	"Mapping Educational Inequalities During the Pandemic" European Commission Joint Research Centre (ECJR)	Apr 27, 2021
	"Learning Inequality during the COVID-19 Pandemic" University of Zurich Research Colloquium	Apr 27, 2021
	"Learning Inequality during the COVID-19 pandemic" World Bank Education Seminar Series	Jan 14, 2021
	"Demography and the Coronavirus Pandemic: What have we learned?" Max Planck Institute, Population Europe Expert Meeting	Nov 9, 2020
	"Learning Inequality during the COVID-19 Pandemic" Organisation for Economic Cooperation and Development (OECD)	Oct 27, 2020
Conferences	IC2S2 International Conference for Computational Social Science (2023), American Sociological Association Annual Meeting (2020), American Political Science Association Annual Meeting (2019, 2020), Population Association of America (2021), IZA & Jacobs Center Con-	

IC2S2 International Conference for Computational Social Science (2023), American Sociological Association Annual Meeting (2020), American Political Science Association Annual Meeting (2019, 2020), Population Association of America (2021), IZA & Jacobs Center Conference (2021), European Consortium for Sociological Research (2020, 2021), Social Science History Association (2020, postponed), European Sociological Association (2019), European Conference on Educational Research (2021), Alternative Futures & Popular Protest (2019).

SERVICE

Reviewer for Terrorism and Political Violence, Proceedings for the National Academy of Sciences, Social Forces, American Political Science Review, Journal of Ethnic and Migration Studies, Economics & Politics, European Sociological Review, European Societies, and PLOS ONE.

References

Professor Michael Biggs
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Professor David Kirk
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Professor Ridhi Kashyap Department of Sociology University of Oxford ridhi.kashyap@nuffield.ox.ac.uk