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 understanding the relationship between technology, inequality, and social change.

RESEARCH INTERESTS

Computational Social Science

Causal Inference

Violence

Migration

Inequality

Positions

Stanford RegLab, Stanford University Data Scientist

2023-Present

Leverhulme Centre for Demographic Science, University of Oxford Postdoctoral Researcher

2021 - 2023

Nuffield College, University of Oxford

2021 - 2023

Nonstipendiary Research Fellow

VISITING POSITIONS

The Alan Turing Institute

Winter 2022

Data Study Group Fellow

Data Science for Social Good Fellowship, Carnegie Mellon University Summer 2022 Data Science Fellow

Harvard University

2020 - 2021

Visiting Fellow

EDUCATION

University of Oxford DPhil Sociology

University of Oxford

2017 - 2021

2014 - 2015

MSc Sociology

PUBLICATIONS

"Inequalities in Healthcare Use during the COVID-19 Pandemic", Nature Communications, 2024 (with Verhagen, MD, and A Tilstra).

"Preventing Eviction-Caused Homelessness through Machine-Learning-Informed Distribution of Rental Assistance", Proceedings of the AAAI Conference on Artificial Intelligence, forthcoming (with Vajiac, C, Baumann, J, Smith, A, Amarasinghe, K, Lai, A, and K Rodolfa).

"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. 孙

"Nowcasting daily population displacement in Ukraine through social media advertising data", Population and Development Review, 2023 (with Leasure, DR, Kashyap, R, Rampazzo, F, Dooley, C, Elbers, B, Bondarenko, M, Verhagen, MD, Yan, J, Akimova, E, Fatehkia, M, Trigwell, R, Tatem, AJ, Weber, I, and MC Mills).

Publications II	"Learning loss due to school closures during the COVID-19 pandemic," <i>Proceedings of the National Academy of Sciences</i> , 2021 (with Engzell, P and MD Verhagen).			
	"Faces in the Crowd: Estimating Protest Ideology with Twitter Data," $PLOS\ ONE,\ 2021$ (with C Barrie).			
	"The impact of mass shootings on attitudes towards gun restrictions in the United States," Socius, 2021 (with DS Kirk).			
	"Getting Under the Skin: The Impact of Terrorist Attacks on Native and Immigrant Sentiment," Social Forces, 2021.			
	"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	"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, The Hindu, and other outlets.			
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 $\&$ 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 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 American Journal of Sociology, Proceedings for the National Academy of Sciences, American Political Science Review, Social Forces, European Sociological Review, Terrorism and Political Violence, Journal of Ethnic and Migration Studies, Economics & Politics, European Societies, and PLOS ONE.

References

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Professor David Kirk
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University of Oxford
david.kirk@sociology.ox.ac.uk

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