KAREN JEFFREY

Political Economist | Data Scientist

karenjeffrey.github.io

SUMMARY

I am a Political Economist and Data Scientist with expertise in survey design, causal inference, and predictive modelling. I have a PhD in Political Economy, eight years of research experience, and a track record of delivering impactful, policy-relevant insights.

EMPLOYMENT

2022 - 2024 Research Fellow in Medical Informatics, University of Edinburgh

Conducted award-winning Medical Informatics research. Applied advanced data science techniques to analyse world class health data. Collaborated with clinicians, patients, and policy-makers.

2021 - 2022 Senior Intelligence Analyst in Public Health, NHS Lothian

Led the development of the Lothian Public Health Survey. Gathered, analysed, and interpreted data and communicated findings to support Public Health planning, policy design, and service delivery.

2018 - 2020 Teaching Assistant in Political Economy, King's College London

Led seminars, held office hours, and marked assignments for undergraduate students studying The Political Economy of Inequality and Microeconomics 1.

2017 - 2018 Senior Research Consultant, BBC Media Action

Managed evaluations of BBC Media Action's international development interventions. Funders included: UNICEF, FCO, DFID, Global Affairs Canada.

2013 - 2016 Researcher, New Economics Foundation (Think tank)

Developed and lobbied for the adoption of new measures of national success. Initiated a new research programme on "The Future of Work." Funders included: European Commission, Co-op, Kingfisher.

2011 - 2013 Analyst, Delta Energy and Environment (Consultancy)

Conducted research and modelling to forecast the impact of policy and technological developments on markets for renewable energy technologies. Clients included: DECC, E.On, British Gas, Bosch.

EDUCATION

2017 - 2021 PhD Political Economy (Pass with no corrections), King's College London
    Thesis: *Essays on the Political Economy of Automation.*

2009 - 2010 M.Sc. Ecological Economics (Distinction), University of Edinburgh

2003 - 2007 B.A. (Hons.) Media (2:1), Queen Margaret University

POLITICAL ECONOMY PUBLICATIONS

Jeffrey, K. (2024). Measuring Automation's Impact on Labor Markets: A new approach is needed.

Jeffrey, K. & Matakos, K. (2024). Automation anxiety, fairness perceptions, and redistribution: How past experience conditions the response to future job loss. *Journal of Economic Behavior & Organization. 221, 174-190.*

Jeffrey, K. (2021). Automation and the future of work: how rhetoric shapes the response in policy preferences. *Journal of Economic Behavior & Organization 192, 417-433.*

Jeffrey, K. (2021). Measuring exposure to automation: a survey approach.

MEDICAL INFORMATICS PUBLICATIONS

Jeffrey, K., Hammersley, V., Maini, R., et al. (2024). Deriving and validating a risk prediction model for long COVID: population-based, retrospective cohort study in Scotland. *Journal of the Royal Society of Medicine.* (In Press).

Jeffrey, K., Woolford, L., Maini, R., et al. (2024). Identifying long COVID using electronic health records: a national observational cohort study in Scotland. *eClinicalMedicine.* 71(102590).

Shi, T., Millington, T., Robertson, C., et al. (2024). Risk of winter hospitalisation and death from acute respiratory infections in Scotland. *Journal of the Royal Society of Medicine.* 117(7)

Millington, T., Morrison, K., **Jeffrey, K.** et al. (2024). Caveats in reporting of national vaccine uptake. *Journal of Global Health. 14(03006)*

Amele, S., McCabe, R., Kibuchi, E., et al. (2024). Quality of ethnicity data within Scottish health records. *Journal of Public Health. 46(1).*

Macdonald, C., Palmateer, N., McAuley, A., et al. (2024) Association between antibody response post-vaccination and severe COVID-19 outcomes. *npj Vaccines. 9(1)*

Kerr, S., Greenland, S., **Jeffrey, K.**, et al. (2023). Understanding and reporting odds ratios and rate ratios in case-control studies. *Journal of Global Health 13(04101).*

Morrison, K., Cullen, L., James, A., et al. (2023). Predictors of incomplete COVID-19 vaccine schedule among adults in Scotland *Vaccine 41(40), 5863-5876*

Kerr, S., Millington, T., Rudan, I., et al. (2023). External validation of the QCovid 2 and 3 risk prediction algorithms for risk of COVID-19 hospitalisation and mortality in adults: a national cohort study in Scotland. *BMJ Open 13:e075958.*

SELECTED THINK TANK REPORTS

Jeffrey, K., Abdallah, S. & Michaelson, J. (2017). The Cost of Loneliness to UK Employers. London: New Economics Foundation.

Jeffrey, K., Wheatley, H. & Abdallah, S. (2016). The Happy Planet Index 2016: A Global Index of Sustainable Wellbeing. London: New Economics Foundation.

Jeffrey, K. and Michaelson, J. (2015). Five Headline Indicators of National Success: A Clearer Picture of How the UK is Performing. London: New Economics Foundation.

Jeffrey, K., Mahony, S., Michaelson, J. and Abdallah, S. (2014). Well-being at Work: A Review of the Literature. London: New Economics Foundation.

ACHIEVEMENTS & AWARDS

2023	**Royal Statistical Society's Florence Nightingale Award** for excellence in healthcare data analytics.
2023	**Royal Society of Edinburgh's Mary Somerville Medal** awarded to the EAVE II Team for exceptional achievement in teamwork and collaborative endeavour.
2013-24	**Press coverage** of research on long COVID (online, TV, and radio), the future of work (online), and reports produced while working at the New Economics Foundation (BBC Daily Mail, Financial Times, Herald, Independent, ITV, Observer, Telegraph, Forbes and press in more than 30 countries worldwide).

GRANTS, FELLOWSHIPS & FUNDRAISING

2024	**Usher Institute Small Grant** University of Edinburgh (£650)
2022	**Data Skills for Work** The Data Lab (£300)
2020	**London Interdisciplinary Social Sciences Scholarship** ESRC (£9,000)
	Small Academic Expenses Grant Royal Economic Society (£450)
	Post-Graduate Research Bursary Grants King's College London (£1,000)
2019	**Post-Graduate Research Bursary Grants** King's College London (£500)
	Cohort Activity Grant ESRC (£1,600)
2018	**Research Development Fund** King's College London (£2,000)
2017	**London Interdisciplinary Social Sciences Doctoral Scholarship** ESRC (£68,000)
	Bentham PhD Fellowship University College London (£64,000, declined)
2011-16	Contributed to successful tenders for funding from European Commission, E.On, British Gas, Vattenfall, Bosch, Vaillant, DECC, Co-op, & Kingfisher Group.

TEACHING & SUPERVISION

2018-20	**Teaching Assistant** The Political Economy of Inequality, King's College London
2018-19	**Teaching Assistant** Microeconomics 1, King's College London
2016	**Volunteer GCSE Maths Tutor** Action Tutoring
2015-16	**Masters Supervision** for MSc in Ecological Economics, University of Edinburgh.

INVITED TALKS & CONFERENCE PRESENTATIONS

2024	**International Conference** Royal Statistical Society
2023	**Medical Informatics Seminar** University of Edinburgh
2022	**National Strategic Network for Long COVID** NHS National Services Scotland
	Academic GPs Meeting on Long COVID University of Edinburgh
	Primary Care Practitioners' Session Public Health Scotland
2021	**Political Science & Political Economy Seminar** London School of Economics
2020	**Political Behaviour Colloquium** European University Institute
	Global Online Meeting Economic Science Association
	Early Career Network Conference Political Studies Association
	Early Career Researcher Seminar University of Southampton
	NORFACE TECHNO Group Norwegian University of Science and Technology
	Quantitative Political Economy Seminar King's College London
	Centre for Experimental Social Sciences Conference New York Univeristy
2019	**Centre for British Politics, PhD Conference** King's Collge London
2018	**AI Safety and Policy Event** Artificial Intelligence Strategy and Policy Network
2016	**Parliamentary Roundtable: How Should We Measure National Success?** UK Government
2015	**Five Headline Indicators of National Success: Report Launch** Royal Statistical Society
2014	**European Social Survey Policy Seminar** OECD

PROFESSIONAL SERVICE

2021-present	**Reviewer** BMJ Open; Oxford Bulletin of Economics and Statistics; European Journal of Political Economy; European Economic Review; Political Science Research & Methods.
2023-2024	**Impact Committee** Usher Institute, University of Edinburgh
2021-2023	**Journal Club Organiser** Medical Informatics Group, University of Edinburgh.
2018	**Conference Organiser and Chair** AI and Automation: Implications for researchers in the social sciences. One-day conference hosted at King's College London.
2018-20	**Reading Group Organiser** Formal Theory Group, King's College London.
2016	**Event Organiser and Chair** An evening in conversation with Ed Miliband MP and Nick Srnicek. The Future of Work: Harnessing new technologies to benefit all.
2014-16	**Secretariat** for the All-Party Parliamentary Group on Wellbeing Economics.

Professional Memberships

2024-present	Fully Accredited Researcher under the Digital Economy Act (2017)
2021-present	European Association of Labour Economists
2020-21	Royal Economic Society
	American Economic Association
	Economic Science Association
2011-14	Institute for Environmental Management and Assessment (Associate Member)
2010-11	International Society for Ecological Economics

Training

2024	**Research, GDPR and Confidentiality (renewal)** Medical Research Council
	Safe Researcher Training UK Data Service
	Data Science for Domain Scientists Data Science Unit, University of Edinburgh
2023	**Aspiring Manager Program** University of Edinburgh
	Data Science in Stratified Healthcare & Precision Medicine University of Edinburgh
2022	**Machine Learning with Python** ED-DaSH, University of Edinburgh
	High-Dimensional Statistics in R ED-DaSH, University of Edinburgh
	GIT for Me: Introduction to GitHub Jumping Rivers
2021	**Managing Difficult Conversations** NHS Professionals
2018	**Introduction to R for Biostatistics and Health Informatics** King's College London
	PhD Summer School: Applied Microeconomics University of Lancaster
2017	**Principles of Economics with Calculus (MOOC)** California Institute of Technology
	Calculus 1a and Calculus 1b (MOOC) Massachusetts Institute of Technology
2014	**Introduction to Statistics Using SPSS** Imperial College London
2013	**Statistics: Making Sense of Data (MOOC)** University of Toronto
	Introduction to Computer Science and Programming in Python (MOOC) MIT

Software Skills

R, LaTeX, Qualtrics, SPSS, Microsoft Office

Referees

Available on request.