

Reka Solymosi

Lecturer in Quantitative Methods

Curriculum Vitae

November 2019

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Employment

- Sep 2016–present **Lecturer in Quantitative Methods**
Department of Criminology, University of Manchester
- Aug 2015–Aug 2016 **Data Analyst**
Transport Policing, Enforcement and On Street Operations, Transport for London
- Aug 2014–Oct 2014 **Data Analyst**
Transport and Street Planning Team, London Borough of Camden

Education

- 2012–2016 **PhD in Crime and Security Science**
University College London
- 2011–2012 **MRes in Crime and Security Science**
University College London
- 2010–2011 **MRes Criminology & Socio-Legal Studies**
University of Manchester
- 2005–2010 **Bachelor of Arts: Major in Sociology & Spanish**
University of British Columbia

Publications

ORCID: 0000-0001-8689-1526

Peer reviewed publications

- Langton, SH and R Solymosi (2019). Cartograms, hexograms and regular grids: Minimising misrepresentation in spatial data visualisations. *Environment and Planning B: Urban Analytics and City Science*, 2399808319873923.
- Solymosi, R (2019). Exploring Spatial Patterns of Guardianship Through Civic Technology Platforms. *Criminal Justice Review* 44(1), 42–59.
- Solymosi, R, K Cella, and A Newton (2018). Did they report it to stop it? A realist evaluation of the effect of an advertising campaign on victims' willingness to report unwanted sexual behaviour. *Security Journal* 31(2), 570–590.
- Solymosi, R and K Bowers (2018). "The role of innovative data collection methods in advancing criminological understanding". In: vol. 210. Oxford University Press, pp.210–237.
- Solymosi, R, KJ Bowers, and T Fujiyama (2017). Crowdsourcing subjective perceptions of neighbourhood disorder: Interpreting bias in open data. *The British Journal of Criminology* 58(4), 944–967.
- Solymosi, R, K Bowers, and T Fujiyama (2015). Mapping fear of crime as a context-dependent everyday experience that varies in space and time. *Legal and Criminological Psychology* 20(2), 193–211.
- Solymosi, R, H Borrión, and T Fujiyama (2015). "Crowd Spatial Patterns at Bus Stops: Security Implications and Effects of Warning Messages". In: *Safety and Security in Transit Environments*. Springer, pp.156–178.

Forthcoming: publications under review for which pre-prints are available.

OSF profile: osf.io/3nzk2.

- Buil-Gil, D, R Solymosi, and A Moretti (2019). Non-parametric bootstrap and small area estimation to mitigate bias in crowdsourced data. Simulation study and application to perceived safety. Retrieved from osf: <https://osf.io/preprints/socarxiv/8hgjt/>.
- Solymosi, R, D Buil-Gil, L Vozmediano, and IS Guedes (2019). A place-based approach to fear of crime: A systematic review of app-based and crowdsourced measures. Retrieved from osf: <https://osf.io/preprints/socarxiv/h3n9w/>.
- Solymosi, R, M Ashby, T Cohen, and A Sidebottom (2017). Alternative denominators in transport crime rates. Retrieved from osf: [io/preprints/socarxiv/neaxh](https://osf.io/preprints/socarxiv/neaxh).

Other outputs

1. Solymosi, R and M Chataway (2019). Using mobile applications for social science research. *LSE Impact Blog*. Available: <https://blogs.lse.ac.uk/impactofsocialsciences/2019/08/14/using-mobile-applications-for-social-science-research/>.
2. Solymosi, R (2019). How to get a DOI for your teaching materials with Zenodo. *Sage Ocean Publications Blog*. Available: <https://ocean.sagepub.com/blog/how-to-get-a-doi-for-your-teaching-materials-with-zenodo>.
3. Solymosi, R and M Chataway (2019). Webinar: Using app-based and sensing methods for social science research. *UK Data Service*. Available: <https://www.ukdataservice.ac.uk/news-and-events/eventsitem/?id=5461>.
4. Solymosi, R (2018). Women in Data Science: mentoring and applying app-based and sensing methods to cognitive and decision sciences. *Software Sustainability Institute Blog*. Available: <https://www.software.ac.uk/blog/2019-08-13-women-data-science-mentoring-and-applying-app-based-and-sensing-methods-cognitive>.
5. Solymosi, R (2018). Northwest Universities R Day event. *Software Sustainability Institute Blog*. Available: <https://www.software.ac.uk/blog/2019-01-23-northwest-universities-r-day-event>.
6. Solymosi, R (2018). Safe Places Through Technological Innovation. *Software Sustainability Institute Blog*. Available: <https://www.software.ac.uk/blog/2018-11-01-safe-places-through-technological-innovation>.
7. Solymosi, R (2018). TICTeC 2018 – An Introduction to the World of Civic Technologies. *Software Sustainability Institute Blog*. Available: <https://www.software.ac.uk/blog/2018-07-17-tictec-2018-introduction-world-civic-technologies>.
8. Solymosi, R (2018). Brexit Data Challenge part 2: presentation at GISRUUK. *Software Sustainability Institute Blog*. Available: <https://www.software.ac.uk/blog/2018-06-21-brexit-data-challenge-part-2-presentation-gisruk>.
9. Solymosi, R (2018). Brexit Data Challenge event. *Software Sustainability Institute Blog*. Available: <https://www.software.ac.uk/blog/2018-04-27-brexit-data-challenge-event>.
10. Solymosi, R (2016). Confidence in transport and policing. Available: <https://www.ucl.ac.uk/transport-institute/pdfs/ConfidenceWorkshop.pdf>.
11. Solymosi, R (2014). Mapping fear of crime dynamically on everyday transport. *JDiBrief Series*. London: UCL Jill Dando Institute of Security and Crime Science. ISSN: 2050-4853. Available: <http://www.ucl.ac.uk/jdibrief/analysis/Mapping-fear-of-crime-dynamically-on-everyday-transport>.
12. Solymosi, R (2014). Transport Streets and Crime. Available: <https://www.ucl.ac.uk/transport-institute/pdfs/transport-streets-crime>.

Funding

Funding awarded as Principal Investigator

2019–2019	Identifying features that affect public engagement with appeals for information about missing persons on Twitter £5,000 funding from Manchester Statistical Society Campion Grant
2018–2019	Using Bayesian Surprise maps to explore debt and insolvency across the UK £10,000 funding from Consumer Data Research Centre, Economic and Social Research Council
2017–2020	Measuring fear of crime using app-based and sensing methodologies £10,000 funding from British Academy and Leverhulme Small Grants
2017–2017	Building Tools and Training for Crime Analysts using R £3,000 funding from N8 Policing Research Partnership
2017–2017	Data Visualisation in Criminal Courts £1,000 funding from Economic Social Research Council, Festival of Social Sciences

Funding awarded as Co Investigator

2019–2020	Civic Innovation in Community: safety, policing and trust with young people £30,000 funding from EPSRC Network+: Social Justice through the Digital Economy
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Teaching

University of Manchester Graduate Level Courses

2018–2019	LAW570542: Evaluating Policy and Practice Lecturer on mandatory module for all Masters streams introducing evaluation research beyond academia
2016–present	LAW570311: Designing Criminological Research Course director and primary lecturer on compulsory research methods module for all Masters streams
2016–2019	LAW570821: Data Analysis with R & R Studio 2016: Course director and sole lecturer, 2018 onwards: ad-hoc lecturer on introductory statistics for MRes students using R

University of Manchester Undergraduate Level Courses

- 2018–present **LAWS31152: Crime Mapping: An introduction to GIS and spatial analysis**
Basics of spatial data visualisation and analysis for 3rd year undergraduate and all graduate students.
- 2017–present **LAWS20452 : Modelling Criminological Data**
Inferential statistics course for 2nd year undergraduates.
- 2017–present **LAWS30620: Short Dissertation**
Lectures and supervision of students on secondary data analysis pathway for their final year dissertation.
- 2016–present **LAWS20441: Making Sense of Criminological Data**
Introduction to quantitative research for 2nd year undergraduates.

Other teaching, short courses, and guest lecturing

- 2019–2019 **Research IT: Data analysis using R**
One-day introduction to R, part of University of Manchester's Research IT series of courses for staff and PhD students.
- 2017–present **methods@manchester: Getting Started in R: introduction to data analysis & visualisation**
Weeklong intensive course introducing students to using R and R Studio for data analysis. Open to all, usually attended by professionals and academics.
- 2017–present **Q-Step internship preparation: Introduction to mapping data with QGIS**
Afternoon short introduction to mapping spatial data for Q-step internship students
- 2017–2017 **Stockholm Royal Institute of Technology (KTH): Spatial Data Analysis in Practice**
One-day introduction to mapping with QGIS and data collection from APIs as part of weeklong summer school for PhD students
- 2012–2017 **University College London MSc Transport Studies: Transport Safety and Security**
Guest lecture for graduate module, UCL Department of Civil, Environmental, and Geomatic Engineering

Invited talks

2019

Mapping and spatial modelling in R for crime prevention and conservation
Sheffield R User Group, UK

The role of innovative data collection methods in advancing understanding, and the importance of considering the biases within

Women in Data Science: Zurich, Switzerland

Keynote: Data-driven insights in law: opportunities and cautions

Berlin Legal Tech Conference 2019, Germany

The role of innovative data collection methods in advancing behavioural understanding

Cognitive and Decision Sciences, University of Basel, Switzerland

The role of innovative data collection methods in advancing criminological understanding

Manchester Metropolitan University Big Data Centre Seminar Series, UK

2018

Crowdsourcing subjective perceptions of neighbourhood disorder: interpreting bias in Open Data

TicTec 2018, Lisbon, Portugal

Interdisciplinary Alchemy: Data Science + Social Science

Data Kind UK

Everybody Lies but Not Everybody Tweets: Making Sense of the Bias in Your Data

Advances in Data Science conference, Manchester, UK

2017

Reproducible Crime Analysis using R

Intelligence Innovation Working Group hosted by West Midlands Police

Building Interactive Data Visualizations

Manchester Methods Fair, UK

Using open data in the social sciences

Her+Data Meetup, Manchester, UK

What is Crowdsourced Data?

Methods@Manchester seminar on research methods in social sciences, Manchester, UK

Eyes and Apps on the Street

Stockholm Royal Institute of Technology (KTH), Sweden

Keynote: Making Sense of Data using Methods

Methods North West Launch Conference, Manchester, UK

Using R for Crime Analysis

Greater Manchester Police, Force HQ, Manchester, UK

Mapping fear of crime as a context-dependent everyday experience that varies in space and time

Horizon 2020 Project MARGIN conference, Budapest, Hungary

Using open data to evaluate current approaches to cabs tasking

11th International Crime Science Conference, London, UK

Fighting Crime (and other bad things) on the transport network

Manchester R User Group meetup

2016

Practitioner-Academic Seminar on Confidence in Policing

Transport for London, UK

Policing and Public Confidence - Confidence at TfL and the challenges of a transport environment

Public Confidence in the Police - University of Warwick, UK

2015

Scheduling student-led learning by enquiry into the curriculum

Teaching and Learning Conference 2015, UCL, London, UK

Alternative Denominators in Transport Crime Rates

Transport Statistics User Group Meeting, London, UK

Using a smartphone app to measure fear of crime on route 25

Transport for London Route 25 Joint Transport Action Group (JTAG) meeting, London, UK

2014

Streets, Crime, and Transport

EPSRC Impact Award Seminar, London, UK

A new approach to mapping perceptions of crime along the door-to-door journey

Transport Geography Research Group Workshop, Leeds, UK

Fear of crime on transport

PopFest, annual Population Studies conference for PhD students, London, UK

Using a smartphone app to report fear of hate crime

Trans London Meetup, London, UK

2013

Crowd spatial patterns at bus stops

Stockholm Royal Institute of Technology (KTH), Sweden

Conference presentations

2019

Linking app-based and physiological measures of fear of crime

Environmental Criminology and Crime Analysis Symposium, Gungzhou China

Mapping Sexual Harassment in Public Places: Open Source Data Driven Contextual Analysis

Environmental Criminology and Crime Analysis Symposium, Gungzhou China

2018

Victimization and perceived safety among college students: Focus on women's transit safety in London, UK

Crime and fear in public places: KTH Royal Institute of Technology, Stockholm, Sweden

Measuring fear of crime through app-based and sensing methodologies

Crime and fear in public places: KTH Royal Institute of Technology, Stockholm, Sweden

2017

Using open data to evaluate current approaches to cabs tasking

American Society of Criminology Conference, Philadelphia, USA

Using open data to evaluate current approaches to cabs tasking

Environmental Criminology and Crime Analysis Symposium, El Salvador

Active Participant

R Open Science Unconference, Los Angeles, USA

2015

Using open crowdsourced data to map signal crimes in place and time

Environmental Criminology and Crime Analysis Symposium, New Zealand

Alternative Denominators in Transport Crime Rate

Stockholm Symposium for Criminology, Sweden

2014

Mapping Fear of Crime Dynamically in Place and Time: Case study of Revenue Protection Inspectors on a London Bus Route

American Society of Criminology, San Francisco, USA

2013

Participatory mapping of fear of crime using a mobile phone application

Urban Data Management Symposium, London, UK

Memberships

- **Curriculum Advisory Board Member** Data Carpentry Social Sciences Curriculum
- **Fellow** Software Sustainability Institute
- **Associate Fellow** Higher Education Academy
- **Board Member** ESRC Business and Local Government Data Research Centre Data Acquisition Board
- **Member** Environmental Criminology and Crime Analysis Symposium
- **Member** Transport Crime Research Network