

Lenka Hasova
lenka.hasova@bristol.ac.uk
haska.lenka@gmail.com
ORCID: 0000-0001-5888-0838
lenkahas.com

Present appointments

University of Bristol

- 2025–
present **Lecturer in Geographic Data Science.** Delivering the Year-3 module *Data Science for Geographers* and the Master's module *Data Science and Machine Learning for Geographers*.
- 2023–
present **Research Associate.** I joined a team working on the UKRI Future Leaders Fellowship project *Mapping Ambient Vulnerabilities (MAV)*, initially part-time and subsequently full-time. Led by Dr Caitlin Robinson, the project examines the accumulation and interaction of ambient vulnerabilities within the air–energy–climate nexus in urban environments, as well as their uneven impacts across people and places. My primary role is to lead research on air-related vulnerabilities. In addition, I provide data science support across the project and collaborate on broader research into energy and climate vulnerabilities.

Past appointments

University of Bristol

- 2025 **Guest Lecturer.** Delivered a session for the *Research Design, Digital Methods and Data Skills* unit on *Big Data in Geography*.
- 2025 **Guest Lecturer.** Delivered a summer school lecture on *Indoor Air Quality and Population Vulnerability across England and Wales*.
- 2024 **Lecturer.** Delivered the Master's module *Urban Analytics and City Science*, including lectures, practical sessions, assessment, administration, and pastoral support. The module focused on network-based methods for data analysis and modelling in urban science applications.
- 2022 **Research Assistant,** University of Bristol & Bristol One City. The Bristol One City Living Rent Commission project, led by Dr Levi Wolf and Dr Alex Marsh, analysed changes in the rental market and informed policymakers about the financial impacts of rent changes on residents. As a research assistant, I contributed to the analysis by developing interactive maps and visualisations. This involved cleaning and managing the *Zoopla Property Price Data* provided by the Urban Big Data Centre (UBDC), University of Glasgow.
- 2019–2023 **Teaching Assistant.** Contributed to teaching across multiple modules, including Introduction to Quantitative Geography, Quantitative Research Methods for Human Geography, Introduction to GIS, Practical Statistics, Spatial Modelling I and II, Data Science for Geographers, GIS and Remote Sensing for Environmental Policy and Management, and dissertation supervision.

Qualifications

2019-2024	Ph.D. , Advanced Quantitative Methods, University of Bristol, UK
2017-2018	MSc , Geographic Data Science, University of Liverpool, UK
2013-2017	Bc. , Geographic Information Science, Remote Sensing and Cartography, University of Ostrava, CZ, with Erasmus year at University of Salford, UK

Publications

 [Google Scholar](#)

Journal Articles

- J1. **Hašová, Lenka**, Robinson, C. & Zhang, L. Indoor air quality vulnerability along the urban-rural continuum: A neighbourhood classification of exposure for England and Wales. *Environment and Planning B: Urban Analytics and City Science*. ISSN: 2399-8083, 2399-8091. <https://journals.sagepub.com/doi/10.1177/23998083251344678> (2025).
- J2. Robinson, C., Atkins, E., Cantellow, T., Chen, M., **Hašová, Lenka** & Singleton, A. A spatial typology of energy (in)efficiency in the private rental sector in England and Wales using Energy Performance Certificates. *Environment and Planning B: Urban Analytics and City Science* **52**, 2316–2325. ISSN: 2399-8083, 2399-8091. <https://journals.sagepub.com/doi/10.1177/23998083251377128> (2025).
- J3. Robinson, C., **Hašová, Lenka** & Zhang, L. Uneven ambient futures: Intersecting heat and housing trajectories in England and Wales. en. *Transactions of the Institute of British Geographers* **50**. ISSN: 0020-2754, 1475-5661. <https://rgs-ibg.onlinelibrary.wiley.com/doi/10.1111/tran.12737> (2025).
- J4. Zhang, L., Robinson, C. & **Hašová, Lenka**. Housing and household vulnerabilities to summer overheating: A Latent Classification for England. en. *Energy Research & Social Science* **125**, 104126. ISSN: 22146296. <https://linkinghub.elsevier.com/retrieve/pii/S2214629625002075> (2025).

Peer-reviewed Conference Proceedings

- C1. **Hasova, Lenka**, Robinson, C. & Verma, T. *Mapping Ambient Vulnerabilities: Commuters' exposure to air pollution* en. in *International Symposium on Applied Geoinformatics (ISAG2026)* (Zenodo, May 2026). [To%20be%20added](#).
- C2. **Hasova, Lenka**, Robinson, C. & Zhang, L. *Mapping Indoor air quality vulnerability across England and Wales: A neighbourhood classification of exposure for England and Wales* en. in *GISRUK2025* (Zenodo, 2025). <https://zenodo.org/doi/10.5281/zenodo.15228619>.

Working papers

- W1. **Hašová, L.**, Robinson, C. & Zhang, L. *Prevalence of indoor overheating in future today's and future climate*. 2027.

ε - Expected

- W2. Evans, J., Robinson, C. & **Hašová, L.** *Energy consumption gap in UK; evidence of spatially varying drivers*. 2026.
- W3. **Hašová, L.**, Wolf, L. & Tranos, E. *Endogeneity and Latent factors in Spatial Interaction Models* WIP. 2026.
- W4. Robinson, C., Evans, J. & **Hašová, L.** *Spatial analysis and Energy Performance Certificates* Spatial analysis and Energy Performance Certificates, REPORT. 2026.
- W5. **Hašová, L.**, Wolf, L. & Tranos, E. *Form and Function in Spatial Interaction: A New Approach to Spatial Structure* Preprint. 2022.

Reports

- R1. **Hašová, Lenka**, Robinson, C., Zhang, L. & National Energy Action (NEA). *Indoor Air Quality Vulnerability: Neighbourhood Insights for England and Wales* Policy research briefings, University of Bristol, 2025. <https://www.bristol.ac.uk/policybristol/policy-briefings/air-quality-vulnerability/>.
- R2. Marsh, A., Wolf, L., Donsoky, A., Reill, M. & **Hašová, L.** "Bristol's big housing conversation" 2023. <https://archive.is/B4yBY>.
- R3. Anderson, A., Bi, I., Day, J., Dorward, N., Fox, S., **Hašová, L.**, Manley, D., Tranos, E. & Wolf, L. *University of Bristol Quantitative Spatial Sciences Lab Review of the 2023 Boundary Commission for England* Draft 2021. <https://www.bcereviews.org.uk/node/83054/view>.

Book section

- BS1. University of Bristol, **Hašová, Lenka**, Wolf, L. & University of Bristol. *Proximity and Distance Decay* 2022. <https://gistbok-topics.ucgis.org/FC-05-017>.

Thesis

- TH1. **Hašová, L.** *Rediscovering the Spatial Structure of Spatial Interaction Through Networks and Advanced Quantitative Methods* 2024. <https://research-information.bris.ac.uk/en/studentTheses/rediscovering-the-spatial-structure-of-spatial-interaction-throug>.

Funding

- 2025 **Aberdeen Financial Fairness Trust** (£73,544; Role: Co-investigator). As part of a team led by PI J. Evans (with co-investigators C. Robinson and L. Hasova), I contributed to a funded project on *Mapping the Geographies of Energy Consumption in Britain*. The project is ongoing and involves data collection, analysis, and stakeholder interviews. I lead the collection and analysis of Energy Performance Certificate Data.
- 2021 **Accelerated Business Collaboration Grant**. (£4700; Role: Principal Investigator) Collaborated with Boots to investigate temporal changes in prescription flows and the impact of COVID-19 restrictions on patients' choice of pharmacy.

2020 **Jane Golding Seed Corn Fund.** (£2000; Role: Principal Investigator) I was awarded funding to research individual-level movement data accessed via ONS Secure Services.

External Recognition

2025 I became a **Royal Geographical Society fellow**; 99009447
 2022 **John Odland Award.** Awarded first prize in the John Odland student competition (Spatial Analysis and Modeling Speciality Group, American Association of Geographers) for presentation of my PhD research.
 2019 **Bristol Council Collaboration Award.** (£1000; Role: Principal Investigator) As part of a hackathon organised by Bristol Open Data and Bristol City Council, I developed an interactive map that assesses Bristol's solar energy potential using open-source data.

Talks

- T1. Hasova, L. *Mapping Ambient Vulnerabilities: Commuters' exposure to air pollution* International Symposium on Applied Geoinformatics (ISAG2026), May 2026.
- T2. Hasova, L. *Mapping Indoor air quality vulnerability across England and Wales: A neighbourhood classification of exposure for England and Wales* UK Health Security Agency (**UKHSA**) Annual Outdoor and Indoor Air Pollution Stakeholder event & Conference, Nov. 2025.
- T3. Hasova, L. *Mapping Indoor air quality vulnerability across England and Wales: A neighbourhood classification of exposure for England and Wales* GISRUUK 2025, Apr. 2025.
- T4. Hasova, L. *On the Endogeneity and Latent Factors of Spatial Interaction Models: How Do We Know the Model Accounts for Spatial Structure?* The European Regional Science Association (ERSA) 63rd Congress, Aug. 2024.
- T5. Hasova, L. *Form and Function in Spatial Interaction; A New Approach to Spatial Structure* American Association of Geographers (AAG) Annual Meeting, Feb. 2022.
- T6. Hasova, L. *Spatial structure of Spatial Interaction: Using Graph structural information in Modelling Bipartite Networks* The European Regional Science Association (ERSA) 61rd Congress, Aug. 2022.
- T7. Hasova, L. *Exploring the use of Network Science in Spatial Interaction Models to Measure Spatial* The Royal Geographical Society-IBG Annual International Conference, Aug. 2021.

Selected Media Coverage

2025 **Podcast Guest**, Jean Golding Institute (JGI). Invited to discuss human interaction in the context of geographic data science.

Tools & Software

2021 [Google Summer of Code 2021](#): I extended functionality in the SpInt module (PySAL library) to compute accessibility for the Competing Destination model.

Academic Advising

Graduate

- 2025 **Mehak Jan**, University of Bristol, Computer Sciences, MSc dissertation: *From UPRN to Action: Small-Area EPC Modelling for Targeted Local Policy*
- 2024 **Josie Ambrose**, University of Bristol, Environmental Policy and Management, MSc dissertation: *Roadside Particulate Matter in Bristol: Evaluating the Effectiveness of the Clean Air Zone and Recommendations for an Expanded Monitoring Network*

Academic Service

- 2025-present School Equality, Diversity and Inclusion (EDI) committee member
- 2021-2023 The Quantitative Spatial Sciences (QUSS) group coordinator
- 2020-2022 PGR Representative

Journal Reviewer

Letters in Spatial and Resource Sciences; Geography Compass; Urban Studies; Scientific Reports, Springer Nature - Journal of Housing and the Built Environment, Discover Cities; Regional Environmental Change; Environment and Planning B: Urban Analytics and City Science; International Journal of Geographical Information Science Editorial Office

Events

- € 2027 **FOSS4G**. Member of the Local Organising Committee, contributing to event delivery, coordination with the University of Bristol, and session chairing.
- € 2026 **Unsolved problems in urban science symposium organised by Planetary Urban Sciences Lab**. I will serve as the event's rapporteur, responsible for synthesising the discussions and compiling the key findings. This documentation will provide the foundational data for a forthcoming peer-reviewed journal article.
- 2025 **GISRUK**. Designed and delivered the Early Career Researcher (ECR) workshop, including chairing a panel discussion.
- 2024 **ERSA, 63rd Congress**. Supported a session on *Networks: An Empirical and Conceptual Toolset to Understand and Model Cities, Regions and Their Interactions*.
- 2021 **RGS-IBG**. Contributed to a session on *The Future of Quantitative Geography*.

Other Experience

- 2022 **Geospatial Data Scientist at [Zsah Ltd Managed Technology Services](#)**. During this placement, I applied expertise developed during my PhD to industry projects. This included accessibility modelling for Royal Mail delivery offices, custom network construction using OpenStreetMap data ([example](#)), scalable routing algorithms, and rush-hour travel time estimation.
- 2019 **GIS Analyst and Developer at [Arup](#)**. As part of the Digital Insight team, I contributed to multiple highway projects, providing GIS data management and spatial analysis. I also developed a machine learning model to predict sewer pollution incidents, enabling the client to identify high-risk locations with greater confidence.
- 2019–2023 **Co-organiser, PyData Bristol**. I co-organised the PyData Bristol meetup group, supporting community events focused on data science and geospatial analysis.

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