Simona Bisiani

Surrey Institute for People-Centred AI
University of Surrey
Guildford, UK
Email: s.bisiani@surrey.ac.uk
URL: www.simonabisiani.github.io
Academic webpage: www.surrey.ac.uk/people/simona-bisiani
LinkedIn: www.linkedin.com/in/simona-bisiani-847763b7/

Current position

2022-now	*Doctoral Researcher* in AI-Assisted Journalism, Surrey Institute for People-Centred AI, Centre for Vision, Speech, and Signal Processing, University of Surrey, UK
2023-now	*Teaching Assistant*, "Topics in People-Centred AI", MSc in Artificial Intelligence, University of Surrey, UK. Module Leader: Dr Bahareh Heravi.
2025-now	*Teaching Fellow*, "Topics in People-Centred AI", MSc in Artificial Intelligence, University of Surrey, UK.

Broad Areas of Research Interests

AI in journalism and media studies, local journalism, spatial inequalities in media access, media ownership consolidation, text mining, AI and society, social media and digital culture, digital research methods, big data analytics, machine learning applications in content analysis and geographic information retrieval (GIR).

Current Research Methods

Web scraping and data mining; automated content analysis using machine learning; large language models (LLMs) for data annotation and GIR; clustering algorithms for content syndication detection; machine learning-based methods for toponym extraction and disambiguation; evaluating AI models in humanities research; scalable AI methodologies for media content analysis and geographic scope assessment.

Teaching

2025	Topics in People-Centred AI, Online MSc in Artificial Intelligence, University of Surrey.
2024	MANM519 - Topics in People-Centred AI, MSc in Artificial Intelligence, University of Surrey. Module Leader: Dr Bahareh Heravi. Class of 2024.
2023	MANM519 - Topics in People-Centred AI, Online MSc in Artificial Intelligence, University of Surrey. Module Leader: Dr Bahareh Heravi. Class of 2023.

Reviewer

(1) Journalism and Media, (2) Problemi dell'Informazione

Professional Experience

2024　*Research Assistant*, School of Creative Arts and Industries, University of Canterbury, Kent, UK, under Professor Agnes Gulyas. Literature Review work culminating in an industry report about salient findings from local media research with relevance to policymakers and industry stakeholders.

2024　*Data Architect*, Public Interest News Foundation, London, UK. Managing and maintaining the local media database architecture, integrating AI solutions, and developing automation scripts.

2023　*Research Assistant*, School of Creative Arts and Industries, University of Canterbury, Kent, UK, under Professor Agnes Gulyas. Digital Data Collection of local media articles following strategic sampling design. Testing of GIS tools to extract toponyms from text.

2021-2023　*Lead Researcher*, DataJournalism.com, European Journalism Centre, Maastricht, The Netherlands. Longitudinal Quantitative Survey Design, Analysis, and Report of "The State of Data Journalism" Survey, since the survey inception in 2021.

2022　*Data Journalist*, Sheldon.studio, Bolzano, Italy.

Grants, honours & awards

2022　Scholarship, Surrey Institute for People-Centred AI, University of Surrey
2022　Studentship, University of Surrey
2016　Best Student Award, Journalism BA Year 3, Robert Gordon University

Publications

Journal Articles

2023　Bisiani, S., Heravi, B. Uncovering the State of Local News Databases in the UK: Limitations and Impacts on Research. *Journalism and Media*, 4, 1211-1231.
https://doi.org/10.3390/journalmedia4040077

2023　Bisiani, S., Abellan, A., Arias Robles, F., & García-Avilés, J. A. (2023). The Data Journalism Workforce: Demographics, Skills, Work Practices, and Challenges in the Aftermath of the COVID-19 Pandemic. *Journalism Practice*, 1–21. https://doi.org/10.1080/17512786.2023.2191866

Industry Reports

2024　Bisiani, S. and Mitchell, J. (2024). "UK Local News Map Report - April 2024". Public Interest News Foundation. London, UK. Accessible at:
https://www.publicinterestnews.org.uk/_files/ugd/cde0e9_31f2ee78fff64c3e8616e7eafdf28f99.pdf

Preprints

2024　Bisiani, S., Mitchell, J., Gulyas, A., & Heravi, B. A Semi-Automated Directory System for the UK Local News Landscape: Supporting Policy and Research. https://doi.org/10.31235/osf.io/zsxdg

Talks

2024　*News deserts and local media state of play.* Panel discussion with Philip Napoli, Agnes Gulyas, and Pedro Jeronimo organised by the European University Institute.

2023   *Data Journalism Today: A Comparative Analysis of Two Consecutive Surveys.* Computation +
Journalism Conference, ETH Zurich. Link to talk

FORTHCOMING

- Local Media in the UK. Industry Report. With Prof Agnes Gulyas.

- Bisiani, S., Gulyas, A., Wihbey, J., & Heravi, B. (under review). UKTwitNewsCor: A
Dataset of Online Local News Articles for the Study of Local News Provision.

- Bisiani, S., Gulyas, A., Wihbey, J., & Heravi, B. (under review). Understanding Local News
Provision in the UK: A Large-Scale Dataset of Content Syndication and Audience Engage-
ment Across Time, Ownership, and Geography.

- Bisiani, S., Hu, X., Gulyas, A., & Heravi, B. (manuscript in preparation). Realising the
Spatial Turn in Local Media: Leveraging Scalable, Efficient, and Accessible LLMs for Data
Annotation and Toponym Resolution.

- Bisiani, S., Gulyas, A., & Heravi, B. (manuscript in preparation). Mapping the Decline: A
Content-Driven Analysis of Local News Provision and Geographic Focus in UK Digital
Media. With Dr Heravi and Prof Gulyas.

- Chao Ling, E., Bisiani, S., Abutaleb, A.-H., Zhang, F., Heravi, B., Xu, T. S., Zhu, X. (under
review). Public Responses to the Impact of ChatGPT on Employment: Topic modeling
and sentiment analysis.

Previous Education

2019-2021   MSc Computational Social Science, Linköping University. **Thesis**: *Blank spots, critical
information needs and local journalism funding: measuring the impact of state financial support
for local journalism on the critical information needs of citizens in Swedish journalistically fragile
municipalities.* **Grades: Excellent** (Logic of Social Inquiry, Statistics and Data Science I, Statistics and
Data Science II, Discrete Choice Modelling, Agent-Based Modelling, Digital Strategies for Social Science
Research, Inequality and Segregation: Theory and Measurement, Visualizing Climate Change, Computa-
tional Approaches to the Study of Cultural Markets and Social Dynamics, Big Data: Social Processes and
Ethical Issues, Master's Thesis in Computational Social Science). **Very Good** (Behavioural Mechanisms in
the Social Sciences, Social Network Analysis)

2013-2017   BA(Hons) Journalism, Robert Gordon University. **Thesis:** Impact of citizen journalism plat-
forms on social capital in Aberdeen. Grade First Class (1:1).

Other Projects

2019-2021   Computational Social Journalism Blog
Co-founder, Blog focusing on the intersection of journalism and computational social science.

Media Appearances

2023

Il Data Journalism in Italia e nel mondo con Simona Bisiani. Interview on Data Journalism with Simona Bisiani. By DataNinja. Available on YouTube.

2021 *Webinar: Computational Social Science at Linköping University*. Webinar discussing computational social science. Available on YouTube.

Languages and Technical Skills

English (Fluent), Italian (Native), Swedish (Fluent), French (Intermediate), Spanish (Intermediate), German (beginner)

- Programming Languages: R, Python, SQL, YAML, HTML

- Frameworks and Libraries: Pandas, tidyverse, quanteda, scikitlearn, Ollama (LLMs), OpenAI API

- LLM Toolkit: Prompt Engineering (CoT, Voting System, Discrimination Systems), RAG, Fine-Tuning (LoRA)

- Development and Analysis Environments: Jupyter Notebooks, Google Colab, Jupyter Lab, Positron, RStudio, Visual Studio Code, Excel, Google Sheets

- Data Visualisation Tools: Tableau, Datawrapper, Flourish, ggplot2

- Version Control Tools: Git, GitHub

- High-Performance Computing Tools: Slurm

Last updated: January 8, 2025