

Tom Cantellow

tcantellow@gmail.com | [Linkedin](#) | [Website](#) | [Portfolio](#)

EDUCATION

University of Bristol

PhD in Human Geography

Bristol, UK

Oct. 2020 – Nov. 2024

University of Sheffield

MSc, Distinction, in Applied GIS

Sheffield, UK

Sep. 2017 – Sep. 2018

Awards: Sheffield Postgraduate Scholarship; Ian Masser Prize for best dissertation

University of Lincoln

BA (Hons), 2:1, in International Relations

Lincoln, UK

Sep. 2012 – May 2016

Ghent University

Erasmus Programme

Ghent, Belgium

Sep. 2014 – Feb. 2015

EXPERIENCE

Senior Scientific Officer - R&D Fellow

Department for Environment, Food & Rural Affairs

Aug. 2024 – Present

Newcastle, UK

- Developed interactive AI chatbots.

Teacher

University of Bristol

Oct. 2020 – May 2025

Bristol, UK

- Designed and lead lectures for *Understanding Global Problems Using Data* unit, teaching quantitative analysis.
- Conducted Political Geography workshops for widening participation initiatives.
- Lead seminars across geographic sub-disciplines: political, economic, urban, and health geographies.

Research Associate

University of Bristol

Apr. 2023 – Sep. 2023 & Jun. 2024 – Dec. 2024

Bristol, UK

- Developed Net-Zero Resilience Index, ranking UK areas by resilience to low-carbon economic restructuring.
- Contributed to public reports, academic articles, and built websites for policy engagement.
- Analysed energy efficiency of Bristol's rental housing and created webmap.

UKRI Policy Intern

UK Home Office, Central Analysis and Insights Team

Jun. 2022 – Sep. 2022

London, UK

- Led analytical initiatives in data visualisation, spatial analysis, and communication for non-experts.
- Consulted on evaluative survey redesign aligned with customer needs.

GIS Consultant

DEMOS

Apr. 2023 – May 2023

London, UK

- Produced all maps included in the 2023 Good Credit Index Report.

PROJECTS

Net Zero Resilience Index | *R*, *Leaflet*, *Github*, *QGIS*, *HTML/CSS*

Jun. 2024 – Dec. 2024

- Developed an economic complexity methodology utilising machine learning to analyse employment in the UK.
- Created a ranked resilience index for regional geographies' net-zero economic transition.
- Visualised and published index map via GitHub Pages.
- Authored detailed report and journal article (under review).

PhD Thesis | *R*, *QGIS*, *SQL*, *LaTeX*

Sep. 2020 – Nov. 2024

- Authored 58,000 word peer-reviewed thesis.
- Uses big data surveys and local economic data with statistical models to analyse voting behaviour.
- Utilised machine learning, mixed-effects models, and descriptive statistics.
- Effectively balanced teaching, research projects, upskilling, and internships.

TECHNICAL SKILLS

Languages: R, Python, SQL (SQLite), HTML/CSS, LaTeX.

Tools: RStudio, Jupyter, Databricks, Posit, QGIS, ArcGIS, ArcGIS Online, Visual Studio, Excel, Overleaf, MS Office.

Libraries: Tidyverse, ggplot2, lme4, sjPlot, dotwhisker, webshot2; Pandas, matplotlib, scikit-learn

Datasets: ACLED, British Election Study, British Social Attitudes Survey, Business Register and Employment Survey, Chapel Hill Expert Survey, Energy Performance Certificates, Indices of Multiple Deprivation, Scottish Census, UK Census, UK Household Longitudinal Study, UK Land Registry, and many others.