**Practical Computational Methods for Social Scientists**

7, 13-14 March 2025  
Dr Diarmuid McDonnell and Rhys Davies

Computational methods are transforming research practice across the disciplines. For social scientists these methods offer a number of valuable opportunities, including creating new datasets from digital sources; unearthing new insights and avenues for research from existing data sources; and improving the accuracy and efficiency of fundamental research activities.

In this three-day course you will learn how to apply computational methods for the collection, management and analysis of textual data. Using Python and R, you will develop skills in collecting data from the web; preparing textual data for computational analysis; and core methods of text data analysis (e.g., sentiment analysis, topic modelling).

**Programme**

**Day 1**

10:00 – 14:10 Welcome

10:10 – 10:30 Lecture 1 – Fundamentals of web scraping

10:30 – 11:15 Practical 1 – Scraping simple webpages

11:15 – 11:30 Break

11:30 – 12:30 Practical 2 – Scraping complex webpages

12:30 – 13:30 Lunch

13:30 – 14:00 Lecture 2 – Fundamentals of APIs

14:00 – 15:00 Practical 3 – Requesting data from APIs

14:45 – 15:00 Break

15:00 – 15:45 Exercise 1 – Web-scraping challenge

15:45 – 16:00 Conclusion