**Confident Spatial Analysis and Statistics in R & GeoDa**

**Learning Outcomes**

**Wifi Networks:**

Eduroam

* Export data from R with projection information
* Understand Linked Displays in GeoDa
* Perform Local Indicators of Spatial Autocorrelation in GeoDa
* Perform Regression in R & GeoDa
* Understand how to read in a variety of formats
* Know how to reorder data
* Understand creating and using functions within R
* Know how to use buffers within R

**Contact**

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**Location**

Room 2015, Building 39 (Soton Stat Sci Res Institute), University of Southampton, University Road, Southampton, SO17 1BJ, UK

**Outline of the day**

* *10:00am – 10:15am – Registration & Refreshments*
* 10:15am – 10:30am – Spatial data and Exploratory Data Analysis
* 10:30am – 11:00am – Practical 1 RStudio and Map Making recap
* 11:00am – 11:30am – Spatial Analysis
* 11:30am – 12:30pm – Practical 2 Performing Spatial Analysis
* *12:30pm – 1:30pm – Lunch*
* 1:30pm – 1:45pm – Spatial Decision Making
* 1:45pm – 3:00pm – Practical 3 Buffers and Intersections
* *3:00pm – 3:15pm – Tea/Coffee*
* 3:15pm – 4pm/4:30pm – Practical 4 Using your own data

**Useful Websites**

* Electronic versions of all resources: <https://github.com/nickbearman/confident-spatial-analysis>
* Data:
  + Global Administrative Areas ([www.gadm.org](http://www.gadm.org/))
  + OS Open Data (<https://www.ordnancesurvey.co.uk/opendatadownload/products.html>)
  + Free GIS Data, Robert Wilson (<http://freegisdata.rtwilson.com/>)

**Useful Points**

* Remember that while an electronic version of the notes is available, typing out the R code is a useful exercise for you.
* Remember that a green post it means you are progressing well, a red post it means you need help (particularly useful if I am busy with someone else, so can’t come to you straight away).
* If you have time, you can complete the optional exercises, but if you don’t have time you don’t need to.

