Understanding Local Modelling

A SASNet Training Seminar

Date: Wednesday 9th November 2016

Venue: Hilton Glasgow Grosvenor, Kelvin Suite
1-9 Grosvenor Terrace, Glasgow, G12 0TA

Presenter: Prof. Stewart Fotheringham, Professor of Computational Spatial Science and Urban Planning at Arizona State University

P R O G R A M M E

13h30 – 13h45:   **Arrival** with Tea/coffee and biscuits provided

13h45 – 13h50:   **Introduction:** Dr. Katarzyna Sila-Nowicka (Research Associate, Urban Big Data Centre) will give an introduction to the seminar within the background context of the SASNet project.

13h50 – 14h50:   **Lecture 1:** *"Local Modelling"*

14h50 – 15h00:   Q&A discussion

15h00 – 15h15:   Mid-Session Break with Tea/coffee and selection of cakes

15h15 – 16h15:   **Lecture 2:** *"My model's BIGGER than yours"* (see abstract overleaf)

16h15 – 16h30:   Q&A discussion, closing comments

END OF SEMINAR

About SASNet

This training seminar is provided as part of the new ESRC-funded Social Analytics Strategic Network (SASNet). The network, jointly founded by The Urban Big Data Centre (UBDC) and Business and Local Government Data Research Centre (BLGRC) focuses on capacity-building for social analytics of emerging heterogeneous forms of data, including big data. This event is presented by our fourth SASNet fellow from the SASNet Fellowship Programme. Please visit the website (ubdc.ac.uk/our-services/sasnet) or email SASNet@glasgow.ac.uk for more information as well as details on how to get involved in future SASNet events.

Presenter Short Bio:

A. Stewart Fotheringham is Professor of Computational Spatial Science in the School of Geographical Sciences and Urban Planning at ASU. He is also a Senior Scientist in the Ann Wrigley Sustainability Institute. He established both the Centre for GeoInformatics at the University of St Andrews in Scotland and the National Centre for Geocomputation in Ireland. He is a member of the US National Academy of Sciences and the Academica Europeae and a Fellow of the UK's Academy of Social Sciences and serves on the Executive Committee of the Transportation Research Board and on the Evaluation panel for the European Research Council's Consolidator Grants scheme. He was awarded the first Science Foundation Ireland Research Professorship in 2004 and has been awarded over $15m in funding, published 12 books and almost 200 research papers and book chapters. His research interests are in the analysis of spatial data sets using statistical, mathematical and computational methods. He is well-known in the fields of spatial interaction modelling and local statistical analysis; the latter as one of the developers of Geographically Weighted Regression. He has substantive interests in health data, crime patterns, retailing and migration.

Abstract:

"*My model's bigger than yours*"

We seem to be surrounded by evidence suggesting we are in a new era in terms of data analysis – that of BIG data. Geography is in the midst of this phenomenon as many of the large data sets that have been produced in recent years have a spatial component. However, another current trend, which is equally important and equally in the domain of geography, has received much less attention: this is the development of BIG models. In this seminar, I demonstrate two examples of BIG models: one consists of an extension of the well-known Geographically Weighted Regression (GWR) framework; the other is an extension of the traditional 'family' of spatial interaction models.