

A Hands-on Introduction to Agent-Based Modelling

3rd & 4th Nov. 2015, Centre for Policy Modelling, MMU

<http://cfpm.org/simulationcourse>

The Centre for Policy Modelling will be (re)running a 2-day introduction to agent-based simulation. The course is free to attend and will be suitable for people without any experience of computer programming, but is particularly aimed at ESR's within the SAF21 Marie-Curie ITN, government and voluntary sector workers, and post-graduate researchers, e.g. PhD students, post-docs, lecturers. This workshop will introduce participants to the modelling of dynamic social processes, such as group membership, influence, imitation collaboration and innovation, through a series of agent-based simulations. Participants will gain understanding of the simulation of social processes by exploring working simulation models and by adapting these models to describe different types of process. It will give participants a first-hand experience of complexity science including the ideas of emergence, self-organisation, chaos, 'lock in' and dynamic systems. We will also consider the limitations and difficulties of such techniques, and how they complement more traditional approaches in the social sciences. This will be a largely hands-on course, exposing participants to a series of simulation models in the NetLogo simulation language. It will include: brief introductions, simplified example models, guided suggestions for interacting with them and assistants to help when you get stuck. There will be some summary sessions to bring out the lessons learnt and additional materials to guide participants onto the next steps of simulation for those that are interested.

Application process

There is no charge to attend the course and places are strictly limited. If you wish to apply for a place, please apply before the 21st of Oct. 2015 by email to <mailto:introabm@cfpm.org>. You must include:

1. Your name
2. Your position/situation (e.g. local government, phd student, Marie-Curie ESR etc.)
3. An email address
4. A 100-word piece that clearly and concisely explains how you anticipate you would benefit from attending

Those securing a place will be notified on or before the 23rd October 2015 and you will be invited to register.

Course Materials, Preparation etc.

It is necessary to bring along a laptop to this event. Please install NetLogo on this laptop before you arrive (this is free from <http://ccl.northwestern.edu/netlogo/>), you will also need a web browser and ability to access a wireless connection. All course materials are on the web at: <http://cfpm.org/simulationcourse>.

If you want to do some preparation for the course, read *Gilbert, N. & Troitsch, K.G. (2005) Simulation for the Social Scientist (2nd Edition). Open University Press.*

Location and Travel Advice

Address: Room 335, Manchester Metropolitan University, Geoffrey Manton Building, Rosamund St West, Manchester M15 6LL, UK.

Google map link: https://www.google.com/maps/d/edit?mid=zBj-VdYFs0fw.kXBpO_thDpts&usp=sharing

Travel advice:

- <http://www2.mmu.ac.uk/travel/manchester/>
- <http://matthewdenny.co.uk/project/main/location.html>

From the airport, take the train to Oxford Road Station or Manchester Piccadilly then walk (10-15 mins walk).

Nearby Hotels etc.

- ibis Manchester Centre, Princess St. <http://www.ibis.com/gb/hotel-3143-ibis-manchester-centre-princess-street/index.shtml>
- Holiday Inn Express Manchester City, Oxford Road <http://www.hiemanchester.co.uk/>
- Luther King House, Brighton Grove off Wilmslow Road, Manchester, M14 5JP. This is cheap but quiet and charming. A short bus trip away. <http://www.lutherkinghouse.co.uk/>

Contact

Any queries please contact: Bruce Edmonds, Bruce@edmonds.name.