Dr Ian Turton

Personal Details

Work Address Centre for Computational Geography, School of Geography, University of Leeds, Leeds, LS2 9JT, +44 113 3433392, Fax: + 44 113 3433308

E-mail i.turton@geog.leeds.ac.uk

Education

1994-1997: M.Sc. in Human Geography (by research) School of Geography, University of Leeds. Application of Pattern Recognition to Concept Discovery in Geography

1988-1992: PhD in Geophysics, Department of Geology and Geophysics, University of Edinburgh. Temporal and Spatial Variations of the Geomagnetic Field, up to a Time-scale of 10^5 Years

1985-1988: B.Sc. (Hons.) 2.1 Geophysics and Planetary Physics, University of Newcastle upon Tyne.

Employment

Mar 2000 – Present: Director, Centre for Computational Geography (CCG), School of Geography, University of Leeds

Oct 1999 – Present: Departmental Research Fellowship, School of Geography, University of Leeds

Nov 1992 - Oct 1999: Researcher, School of Geography, University of Leeds

Recent Academic and Professional activities

Nov 2004 – July 2004: Developing Interoperable Web Mapping for the Academic Sector,

This project brings together teams from data providers, end users and technology developers in the UK higher education sector. My role in the project is building an annotation service which allows users to add text and imagery to geometries they have drawn on the maps from the web map servers developed by the data providers at EDINA and MIMAS.

March 2003 – Sept 2004: Deputy Director, Great Britain Historical GIS

This ambitious project tries to make historic census data and boundary data available to the public on a dynamic web site. The core of the project is an oracle database containing over 200,000 boundaries of census units with statistics associated with them. These are presented on the public web site using (http://www.visionofbritain.org.uk) Open GIS Consortium (OGC) web map servers, that can combined with the scanned historical maps also produced as part of the project.

Nov 2002 – Oct 2003: Conformance and Interoperability Testing Exercise (CITE)

Open GIS Consortium funded project to develop reference implementations of the web map server and web feature server specifications. My role in this project was to coordinate the two development teams (based in New York and Germany) and look towards a combining of the underlying feature and geometry models.

Research Interests

Over the course of my career I have worked on many varied projects. The common theme has been to allow users to gain access to data and the tools that allow them to make informed decisions. Much of my recent work has focused on using open standards and open source tools to allow the general public access to geospatial data.

I am also an active member of the Open Geospatial Consortium (www.opengis.org). Open interfaces and protocols defined by Open GIS Specifications support interoperable solutions that "geo-enable" the Web, wireless and location-based services, and mainstream IT, empowering technology developers to make complex spatial information and services accessible and useful with all kinds of applications. As part of this activity, I am a member of the Styled Layer Descriptor (SLD) revision working group, which is a group of industry and academic experts who come together to revise the initial specification of this standard. This allows me to contribute directly to the formulation of the standards that the next generation of GIS platforms will be built on. I have presented papers on the development of web services to both specialist groups and to the full technical committee of the OGC.

Recent Publications

(1) **Turton, I.,** (2005) Presenting 19th Century Data Using 21st Century Standards, *International Journal of GIS*, in preparation.

(2) **Turton, I.** and Walder, A., (2005) A comparative study of migration of academic workers to Britain from the EU, *Transactions of the Institute of British Geographers*, submitted.

(3) **Turton, I.** (2005) Modelling Land use Development Using Multi-Agent Systems, *Environment and Planning B – Planning and Design*, in revision

(4) Ballas, D., Clarke, G.P. & **Turton, I**. (2003) 'A spatial microsimulation model for social policy evaluation' *in* B. Boots, R. Thomas (eds.) *Modelling geographical systems*, Kluwer, Netherlands, 143-168

(5) **Turton, I.** (2002) On-line tabulation for the Samples of Anonymised Records *in* Rees, P., Martin, D. and Williamson, P., (eds.), *The Census Data System*, John Wiley, Chichester, pp. 213-219

(6) Carver, S., Evans, A., Kingston, R. and **Turton, I**., (2001) Public participation, GIS and Cyberdemocracy: Evaluating on-line spatial decision support systems, *Environment and Planning B – Planning and Design*, **28.6**, pp. 907-921

(7) **Turton, I.** and Openshaw, S., (2001) Using the geographical analysis machine to investigate primary school league table performance, *Geographical and Environmental Modelling*, **5.1**, pp. 85-101

(8) **Turton, I.** and Openshaw, S, (2001) Automated crime pattern analysis using the geographical analysis machine, *in* Hirchsfield, A and Bowers, K. (eds.), Mapping and Analysing Crime Data, Taylor and Francis, pp. 11 – 26

(9) Carver, S., Evans, A., Kingston, R. and **Turton, I.**, (2000), Accessing Geographical Information Systems over the World Wide Web: Improving public participation in environmental decision-making, *Information Infrastructure And Policy*, **6.3**, pp. 157-170

(10) Kingston, R., Carver, S., Evans, A., and **Turton, I.**, (2000) Web-based public participation geographical information systems: An aid to local environmental decision-making, *Computers, Environment and Urban Systems,* **24,** pp. 109-125

(11) Kingston, R., Carver, S., Evans, A. and **Turton, I**., (2000) Combining a GIS with the accessibility of the Internet can give a wide audience a say in environmental decision-making, *Surveyor*, ISSU 5579, pp. 12-15

(12) Openshaw, S. and **Turton, I.**, (2000) *Parallel Programming in Geography*, Routledge, London

(13) **Turton, I.**, (2000) Parallel processing in geography *in* Openshaw, S, Harris, T. and Abrahart, R., (eds.), *GeoComputation*, Gordon and Breach

(14) **Turton, I.**, Openshaw, S., Brunsden, C., Turner, A. and Macgill, J., (2000) Exploring Geographical Hyperspaces *in* P. Atkinson and D. Martin (eds.), *Innovations in GIS 7*, pp. 87-100, Taylor and Francis, London.