

Carson J. Q. Farmer

National Centre for Geocomputation,
National University of Ireland, Maynooth
Co. Kildare, Ireland
Phone: +353 (0) 85 2818896
Email: Carson.Farmer@nuim.ie

Education

- 2008 – present **National University of Ireland**, Maynooth, Co. Kildare, Ireland
PhD in Geocomputation
Research focus: *Urban landscapes, geocomputation, GIS, spatial analysis*
- 2006 – 2008 **University of Victoria**, Victoria, B.C., Canada
MSc in Geography
Dissertation: *Spatial Time-series analysis of satellite derived snow water equivalence*
- 2001 - 2006 **University of Victoria**, Victoria, B.C., Canada
BSc, Honours (with Distinction), in Geography
Dissertation: *Mapping the effects of the modifiable areal unit problem on local measures of spatial autocorrelation.*

Awards and Scholarships Received

- 2008 SSHRC Doctoral Fellowship, Social Sciences and Humanities Research Council of Canada
- 2008 ISSP Doctoral Fellowship, National Centre for Geocomputation, National University of Ireland
- 2007 Derrick Sewell Graduate Scholarship, University of Victoria
- 2007 Canadian Association of Geographers paper presentation award
- 2006 Derrick Sewell Graduate Scholarship, University of Victoria
- 2006 Canadian Cartographic Association paper presentation award
- 2006 Ross Fund Undergraduate Scholarship, University of Victoria

Publications & Presentations

Refereed Publications

Farmer, C.J., Nelson, T.A., Wulder, M.A., Derksen, C. (submitted) Temporal trends in the spatial association of satellite derived snow water equivalence: Relationships with land-cover and elevation. *The Canadian Geographer*. March 25, 2008.

Robertson, C., **Farmer, C.J.**, Nelson, T.A., Mackenzie, I.K., Wulder, M.A., and White, J.A. (submitted) Determination of the compositional change (1999-2006) in the pine forests of British Columbia due to mountain pine beetle infestation. *Environmental Monitoring and Assessment*, March 07, 2008.

Robertson, C. and **Farmer, C.J.** (2008) Developing an open-source framework for surveillance and analysis of emerging zoonotic diseases. *Proceedings of the Fifth National Symposium on Geo-Informatics of the Geo-Informatics Society of Sri Lanka*. p. 123-134, July 25, 2008, Colombo, Sri Lanka.

Carson J. Q. Farmer

National Centre for Geocomputation,
National University of Ireland, Maynooth
Co. Kildare, Ireland
Phone: +353 (0) 85 2818896
Email: Carson.Farmer@nuim.ie

Non-Refereed Publications

Farmer, C. J., (2006) Mapping the effects of the modifiable areal unit problem on local measures of spatial autocorrelation. *Honors Thesis, University of Victoria, Victoria, British Columbia, Canada, 85 pp.* (Undergraduate Work).

Farmer, C. J., (2008) Spatial Time-series analysis of satellite derived snow water equivalence. *Masters Thesis, University of Victoria, Victoria, British Columbia, Canada, pp.* (Post-graduate Work)

Conference Presentations

Farmer, C. J., Nelson, T., Derksen, C. and Wulder, M. (2008) Determination of Canadian snow regimes using spatial-temporal analysis methods. *AAG Annual General Meeting*. April 15-19, Boston, M.A., US.

Farmer, C. J., Nelson, T., Derksen, C. and Wulder, M. (2008) Determination of Canadian snow regimes using passive microwave radiometry. *Spatial Knowledge and Information*. February 14-17, Fernie, B.C., Canada.

Farmer, C. J., Robertson, C., Nelson, T.A., Mackenzie, I.K., Wulder, M.A., and White, J.A. (2007) Integrating disparate mountain pine beetle datasets for detailed large-area mapping. *University of Victoria, Geography Student Conference, Bridging the Gap 2007*, November 28, Victoria, B.C.

Farmer, C. J., and Nelson, T., Derksen, C. and Wulder, M. (2007) Linking the Spatial-Temporal Interactions of Spatial Association in SWE to Land-cover Characteristics. *Canadian Association of Geographers Annual General Meeting*. May 29-June 2, Saskatoon, S.K. (Winner of the CAG paper presentation award in Physical Geography.)

Farmer, C. J., and Nelson, T., Derksen, C. and Wulder, M. (2007) The Impact of Temporal Resolution on Snow Water Equivalence Monitoring. *Western Canadian Association of Geographers*. March 8-10, Abbotsford, B.C.

Farmer, C. J., O'Connell, I., and Nelson, T. (2006) Mapping the effects of the modifiable areal unit problem on local measures of spatial autocorrelation. *GeoTec Event 2006*. June 18-21, Ottawa, O.N. (Winner of the CCA best student paper presentation award.)

Farmer, C. J., O'Connell, I., and Nelson, T. (2006) Mapping the effects of the modifiable areal unit problem on local measures of spatial autocorrelation. *Western Canadian Association of Geographers*. March 10-11, Kamloops, B.C.

Carson J. Q. Farmer

National Centre for Geocomputation,
National University of Ireland, Maynooth
Co. Kildare, Ireland
Phone: +353 (0) 85 2818896
Email: Carson.Farmer@nuim.ie

Work and Volunteer Experience

- April 2008 **Session Chair** (2008 AAG Annual General Meeting)
- Chair of Environmental Monitoring and Remote Sensing Paper Session
 - Introduce presenters
 - Ensure smooth running of session
- 2006 - 2008 **Research Assistant** (Department of Geography, UVic)
- Mapping post-beetle forest structure from aerial overview surveys and forest inventory data
 - Model development and data management
 - Field based research and data collection
- 2006 - 2008 **Teaching Assistant** (Department of Geography, UVic)
- Instructing and supervising weekly laboratory classes
 - Evaluating and marking student laboratory assignments, projects, and exams
 - Developing new GIS based laboratory exercises as well as updating and streamlining current exercises
- 2006 - 2008 **Spatial Salon Organizer** (Department of Geography, UVic)
- Organizing discussions and lectures in advanced spatial analysis and statistics
 - Develop relevant discussion topics and choose appropriate journal articles for review
 - Presenting pre-discussion background talks and context for meetings
- April 2007 **Geography Student Conference Organizer** (Department of Geography, UVic)
- Organizing facilities for paper and poster presentations
 - Promotional activities, and liaison between students and faculty
 - Session chair for Physical Geography paper sessions
- June 2006 **GeoTec Event 2006 Volunteer** (GeoTec Event 2006)
- Facilitation, troubleshooting, and data collection for multiple sessions and panel discussions
 - Assist in general event proceedings
 - Evaluate response and interest in panel discussions

Carson J. Q. Farmer

National Centre for Geocomputation,
National University of Ireland, Maynooth
Co. Kildare, Ireland
Phone: +353 (0) 85 2818896
Email: Carson.Farmer@nuim.ie

Demonstrated Skills

Software

ArcGIS, ArcInfo Workstation, ENVI, QGIS
R, SPSS, S-PLUS
GeoDa, CrimeStat, Map Comparison Kit

Programming

ArcObjects with VBA, VB6, and VB.Net
R statistical computing language
AML, Python

Cartography

Adobe Illustrator, Corel Graphics Suite, GIMP, InkScape
ArcMap for ArcGIS

References

Dr. Trisalyn A. Nelson
Director, SPAR Lab
Assistant Professor
Department of Geography
University of Victoria
PO Box 3050 STN CSC
Victoria, BC, V8W 3P5
Phone: 250-472-5620
Fax: 250-721-6216
Email: trisalyn@office.geog.uvic.ca

Dr. Ian J. O'Connell
Senior Instructor for Geomatics
Department of Geography
University of Victoria
PO Box 3050 STN CSC
Victoria, BC, V8W 3P5
Phone: 250-721-7338
Fax: 250-721-6216
Email: oconnell@office.geog.uvic.ca