

Curriculum Vitae

COLIN ROBERTSON

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Education

2007 – Ph.D., University of Victoria
2005 – 2007 M.Sc., University of Victoria
2003 – 2004 Adv.Dip., British Columbia Institute of Technology
1998 – 2002 B.A. (honours), Simon Fraser University
1997 – 1998 A.A., Capilano College

Teaching Experience

2009 Instructor: Geog 418/518, Advanced Spatial Analysis and Geostatistics. University of Victoria
2006 Teaching Assistant: GIS for Natural Sciences. University of Victoria
2005 Teaching Assistant: GIS for Social Sciences. University of Victoria

Research Experience

2010 Research Assistant: Department of Mathematics and Statistics. University of Victoria - Bayesian space-time modelling.
2008 – 2010 Research Associate: Population Data BC - Space-time disease surveillance.
2006 – 2009 Research Assistant: Spatial Pattern Analysis and Research Lab. University of Victoria - Spatial-temporal analysis of mountain pine beetle, mapping post-beetle forest landscapes, spatial-temporal analysis of gray whale predator-prey dynamics.

Honors and Awards

2008 – 2010 NSERC Post Graduate Scholarship
2008 – 2010 UVIC President's Research Award
2007 – 2009 Ajaib Singh Sangha Memorial Scholarship
2008 Spatial Knowledge and Information Conference Paper 2nd Place Prize
2007 CAG Annual Meeting Best Paper Prize, GIS Category
2007 CAG Annual Meeting Best Paper Prize, Environment Category
2007 Pacific Century Graduate Scholarship
2006 ESRI UC Student Assistantship
2006 Derrick Sewell Graduate Scholarship
2005 – 2006 Pacific Forestry Centre Graduate Student Award

Publications

Submitted journal articles

Peer-reviewed Articles

- 2010 11. Robertson, C., Sawford, K. Daniel, S.L.A., Nelson, T.A., Stephen, C. (In Press) *Mobile Phone-based Infectious Disease Surveillance System, Sri Lanka*. Emerging Infectious Diseases.
10. Robertson, C., Nelson, T.A., MacNab, Y.C., Lawson, A.B. (2010) *Review of methods for space-time disease surveillance*. Spatial and Spatio-temporal Epidemiology, (1):105-116.
9. Robertson, C., Nelson, T.A. (2010) *Review of software for space-time disease surveillance*. International Journal of Health Geographics, **9**:16.
- 2009 8. Nelson, T.A., Duffus, D., Robertson, C., Laberee, K. and Feyrer, L.J. (2009) *Spatial-temporal analysis of marine wildlife*. Journal of Coastal Research. Special Issue **56**:1537-1541.
7. Robertson, C., Nelson, T.A., Jelinski, D.E., Wulder, M.A. and Boots, B. (2009) *Spatial-temporal analysis of species' range expansion: the case of the mountain pine beetle, Dendroctonus ponderosae*. Journal of Biogeography, **36**(8):1446-1458.
6. Robertson, C., Farmer, C.J.Q., Nelson, T.A., Mackenzie, I.K., Wulder, M.A. and White, J.C.(2009) *Determination of the compositional change (1999-2006) in the pine forests of British Columbia due to mountain pine beetle infestation*. Environmental Monitoring and Assessment, **158**:593-608.
- 2008 5. 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. pp.123-134, July 25, 2008, Colombo, Sri Lanka.
4. Robertson, C., Wulder, M.A., Nelson, T.A., and White, J.C. (2008) *Risk rating for mountain pine beetle infestation of lodgepole pine forests over large areas with ordinal regression modelling*. Forest Ecology and Management, **256**:900-912.
3. Nelson, T.A., Duffus, D. Robertson, C. and Feyrer, L-J. (2008) *Spatial-temporal patterns in intra-annual gray whale foraging: characterizing interactions between predators and prey in Clayquot Sound, British Columbia, Canada*. Marine Mammal Science. **24**:356-370.
- 2007 2. Robertson, C., Nelson, T.A., Boots, B. and Wulder, M.A. (2007) *STAMP : Spatial - temporal analysis of moving polygons*. Journal of Geographical Systems. **9**:207-227.
1. Robertson, C., Nelson, T.A., and Boots, B. (2007) *Mountain pine beetle dispersal: the spatial-temporal interactions of infestation*. Forest Science. **53**:395-405.

Technical Reports

- 2010 2. Robertson, C., Wulder, M.A., Nelson, T.A., White, J.C. (2009) *Preliminary risk rating for mountain pine beetle infestation of lodgepole pine forests over large areas with ordinal regression modelling*. Natural Resources Canada, Canadian Forest Service, Pacific Forestry Centre, Victoria, BC. Mountain Pine Beetle Working Paper 2009-19. 24 p.
1. Robertson, C., Nelson, T.A., Boots, B. (2008) *Exploring the spatial-temporal interaction of mountain pine beetle infestations*. Natural Resources Canada, Canadian Forest Service, Pacific Forestry Centre, Victoria B.C. Mountain Pine Beetle Working Paper 2007-09. 39 p.

Conference Presentations

- 2010 12. Robertson, C. (2010). Statistical modelling of spatial and temporal patterns in frontline veterinary surveillance data. Teasdale-Corti Global Health Research Project Workshop. July 27, Peradeniya, Sri Lanka.

11. Robertson, C., Nelson, T.A., MacNab, Y.C., Lawson, A.B. (2010). Review of methods for space-time disease surveillance. NICDS Workshop on Statistical Methods for Geographic and Spatial Data in the Management of Natural Resources. March 3-5, Montreal, QC.
- 2009 10. Robertson, C., Sawford, K., Stephen, C., Daniel, S.L.A., and Nelson, T.A. (2009) Infectious Disease Surveillance and Analysis - Sri Lanka.[POSTER] GEOMED 2009. November 14-16, Charleston, SC.
9. Robertson, C., Farmer, C.J.Q., Nelson, T.A., Mackenzie, I.K., Wulder, M.A., and White, J.C. (2009) Assessing compositional change in pine forests of British Columbia during a mountain pine beetle epidemic. Annual Meeting of the American Association of Geographers. March 22-27, Las Vegas, ND.
8. Robertson, C. Wulder, M.A., Nelson, T.A. and White, J.C. (2009) The effects of landscape pattern on mountain pine beetle spread. Spatial Knowledge and Information Conference. Feb 20-21, Fernie, BC
- 2008 7. Robertson, C. and Farmer, C.J. (2008) Developing an open-source framework for surveillance and analysis of emerging zoonotic diseases. Fifth National Symposium on Geo-Informatics of the Geo-Informatics Society of Sri Lanka. July 25, 2008, Colombo, Sri Lanka.
6. Robertson, C., Wulder, M.A., Nelson, T.A. and White, J.C. (2008) Augmenting an existing rating system for mountain pine beetle infestation of lodgepole pine forests. Annual Meeting of the American Association of Geographers. April 15-19, Boston, MA.
5. Robertson, C. and Nelson, T.A. (2008) A comparison of methods for computing cardinal directional relations between polygons. Spatial Knowledge and Information Conference. Feb 15-17, Fernie, BC
- 2007 4. Robertson, C., Nelson, T.A., Wulder, M.A., and Boots, B. (2007) Mountain pine beetle movement patterns during range expansion. Best paper, Environment Category. Annual General Meeting of the Canadian Association of Geographers. May 29 - June 2, Saskatoon, Sask.
3. Robertson, C., Nelson, T.A., Boots, B. and Wulder, M.A. (2007) STAMP: Spatial-temporal analysis of moving polygons. Annual Meeting of the American Association of Geographers. April 17 -21, San Francisco, CA.
2. Robertson, C. Nelson, T., Boots, B. and Wulder, M.A. (2007) Spatial-temporal analysis of moving polygons. Annual Meeting of the Western Division, Canadian Association of Geographers. March 9-10, Abbotsford.
- 2006 1. Robertson, C. and Nelson, T. (2006) An exploratory analysis into mountain pine beetle dispersal. Annual Meeting of the Western Division, Canadian Association of Geographers. March 10-11, Kamloops.

Lectures and Workshops

Talks

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| 2010 | Aug | Frontline animal health surveillance: Development and analysis in Sri Lanka. National Centre for Geocomputation. National University of Ireland, Maynooth Ireland. |
| | May | Spatial analysis of emerging, expanding, and epidemic processes. Department of Geography and Environmental Studies, Wilfrid Laurier University. |
| 2009 | Nov | Geography Department Colloquium: Bumbling Down the Long and Winding Road: A dispatch from the PhD frontlines. Department of Geography, University of Victoria. |
| | Oct | Geog 439 Guest Lecture: Frontline Infectious Disease Surveillance in Sri Lanka: Progress, challenges and opportunities. Department of Geography, University of Victoria. |

- Mar Geog 428 Guest Lecture: Disease Surveillance. Department of Geography, University of Victoria.
- 2008 Jul GIS/RS Class Guest Lecture: Introduction to GIS and Spatial Analysis. Postgraduate Institute of Science, University of Peradeniya.
- 2006 Sep Morice Forest District Guest Lecture: Space-time analysis of mountain pine beetle dispersal. Morice Forest District, Houston, B.C.

Workshops Led

- 2010 Jul Teasdale-Corti Global Public Health Research Partnership Workshop: Spatial Analysis of Disease Data
- 2009 Aug Population Data BC Summer Workshop: Introduction to Space-Time Disease Surveillance
- Jun Population Data BC Workshop: Introduction to GeoDa and Spatial Modelling
- Jun Teasdale-Corti Global Public Health Research Partnership Workshop: GIS and Spatial Analysis for Veterinary Applications

Academic Service

- 2009 – Reviewer, Journal of Applied Ecology
- 2006 – 2009 Spatial Analysis Salon Organizer, University of Victoria

Non-academic Employment

- 2004 – 2005 Woodlands Information Technician, Canadian Forest Products, Fort Nelson, BC.
- 2004 – 2004 GIS Technician, City of Nanaimo, Nanaimo, BC.
- 2002 – 2003 English as a Second Language Teacher, Ewha Language School, Suji-Eup, Gyonggi-Do, Republic of South Korea

References

Available upon request.