

CURRICULUM VITAE

VICTOR MESEV

Associate Professor

Department of Geography

Florida State University

Tallahassee, FL 32306-2190

Tel (850)645-2498, Fax (850)644-5913, Email: vmesev@fsu.edu

Research

Urban remote sensing, integration of geographical information systems and remote sensing, image spectral and spatial classification, disaggregate cartographic representation, urban morphological modeling, and population interaction

Appointments

2004–present Associate Professor in Geography, Florida State University, Tallahassee, USA
 1999–2004 Lecturer in Geography, University of Ulster, Coleraine, UK
 1998–1999 Research Associate, NERC, University of Bristol, UK
 1995–1998 Research Fellow, ESRC, University of Bristol, UK
 1994–1995 Temporary Lecturer in Geography, University of Bristol, UK

Education

1995 Ph.D. Geography, University of Bristol, UK
 1991 M.A. Geography, The Ohio State University, Columbus, USA
 1989 B.A. Geography (1st Class Honors), University of Leicester, UK

Teaching

Director of M.S. Applied Geographical Information Systems, Florida State University
 Advanced Geographical Information Science, Advanced Remote Sensing, Socioeconomic Applications in GIS, Remote Sensing, Map Analysis, Urban Analysis

Publications

Books

1. *Integration of GIS and Remote Sensing* (edited) Chichester: Wiley (forthcoming)
2. *Remotely Sensed Cities* (edited) 2003, London: Taylor & Francis

Journal Articles and Book Chapters

3. Fusion of point-based urban data with IKONOS imagery for locating urban neighborhood features and patterns. *International Journal of Information Fusion* (forthcoming)

4. Identification and characterization of urban building patterns using IKONOS imagery and point-based postal data. *Computers, Environment & Urban Systems* (forthcoming)
5. Urban morphology reconstruction: links between satellite imagery and address information. In S Wise and M Craglia (editors) *GIS and Evidence-based Policy Making*, London: Taylor & Francis (V Mesev and P McKenzie) (forthcoming)
6. Classification of urban areas: inferring land use from the interpretation of land cover. In C Jurgens and T Rashed (editors) *Remote Sensing of Urban and Suburban Areas*, Berlin: Kluwer (forthcoming)
7. Change detection through spatial/ textural analyses. In M Ridd (editor) *Manual of Remote Sensing: Human Settlement*, Bethesda: ASPRS (V Mesev and N Lam) (forthcoming)
8. Urban land use uncertainty: Bayesian approaches to urban image classification. In V. Mesev (Editor), *Remotely Sensed Cities*, London: Taylor & Francis 207–222. 2003
9. Urban land use reconstruction: image pattern recognition from address point information. *The ISPRS International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences* 34-7. 2003
10. Neighbourhood pattern recognition from mailing information: links with satellite imagery. *Journal of Space Communication (Remote Sensing from Satellites)* issue 3 [<http://satjournal.tcom.ohiou.edu/pdf/Mesev.pdf>] 2003.
11. Measurement of density gradients and space-filling in urban systems. *Papers in Regional Science* 81(1):1–28 (P Longley and V Mesev) 2002
12. Modified maximum likelihood classifications of urban land use: spatial segmentation of prior probabilities. *Geocarto International* 16(4):39–47. 2001
13. Definitions of GIS and other related terms. In J Matthews (coordinating editor) *The Encyclopedic Dictionary of Environmental Change*, London: Arnold. 2001
14. Modified maximum-likelihood classifications algorithms and their application to urban remote sensing. In J-P Donnay, M Barnsley and P Longley (editors) *Remote Sensing and Urban Analysis*, London: Taylor & Francis 71–94 (V Mesev, B Gorte and P Longley) 2001
15. Measuring the 'urban' measuring and modeling a regional settlement hierarchy. In N Tate and P Atkinson (editors) *Modeling Scale in Geographical Information Science*, Chichester: Wiley 53–67 (V Mesev and P Longley) 2001

16. Bayesian modifications to maximum-likelihood classifications of urban characteristics. In A Nienartowicz and M Kunz (editors) *GIS and Remote Sensing in Studies of Landscape Structure and Functioning*, Poland: Nicholas Copernicus Press 51-75. 2001
17. Measuring urban morphology using remotely sensed imagery. In J-P Donnay, M Barnsley and P Longley (editors) *Remote Sensing and Urban Analysis*, London: Taylor & Francis 71–94 (P Longley and V Mesev) 2001
18. On the measurement and generalization of urban morphology. *Environment and Planning A*, 32(3):473–488 (P Longley and V Mesev) 2000
19. Integration issues in GIS and remote sensing, *Computers, Environment & Urban Systems*, 23(1):1–3. 1999
20. Urban analysis from remote sensing and GIS. In P Atkinson and N Tate (editors) *Advances in Remote Sensing and GIS Analysis*, Chichester: Wiley 185–206 (V Mesev and P Longley) 1999
21. From measurement to analysis: a GIS/RS approach to urban density changes. In M Craglia and H Onsrud (editors) *Geographic Information Research: Transatlantic Perspectives*, London: Taylor & Francis 303–317. 1999
22. The use of census data for urban image classification. *Photogrammetric Engineering and Remote Sensing* 64(5):431–438. 1998
23. Remote sensing and regional density gradients. In S Carver (editor) *Innovations in GIS 5*, London: Taylor & Francis 226–237 (V Mesev and P Longley) 1998
24. Remote sensing of urban systems: hierarchical integration with GIS. *Computers, Environment & Urban Systems* 21(3/4):175–187. 1997
25. Beyond analogue models: space filling and density measurements of an urban settlement. *Papers in Regional Science* 76(4):409–427 (P Longley and V Mesev) 1997
26. The use of diverse RS-GIS sources to measure and model urban morphology. *Geographical Systems* 4(1):5–18 (P Longley and V Mesev) 1997
27. RS/GIS and the morphology of urban settlements. In P Longley and M Batty (editors) *Spatial Analysis: Modelling in a GIS Environment*, Cambridge: GeoInformation International, 123–148 (V Mesev, M Batty and P Longley) 1996
28. Measurement and modelling of urban remotely-sensed data. *International Archives of Photogrammetry and Remote Sensing*, Vienna, Austria, Vol. XXXV. 1996

29. Fractal measurements of a classified image: the case study of Bristol, England. In M. Fischer, T Sikos and L Bassa (editors) *Recent Developments in Spatial Information, Modelling and Processing*, Budapest: Geomarket, 107–122 (V Mesev, P Longley, M Batty and Y Xie) 1995
30. Morphology from imagery: detecting and measuring the density of urban land use. *Environment and Planning A* 27(5): 759–780 (V Mesev, P Longley, M Batty, and Y Xie) 1995
31. Waste disposal site selection using raster and vector GIS. *Mapping Awareness* 5(1): 24–27 (D Maguire, W Hickin and V Mesev) 1991

Reports

32. Measurement and Analysis of Urban Morphology and Land Use Change. End of Award Report on ESRC Research Fellowship No. H53627501295, 32 pp, ESRC and British Library Document Supply Centre 1998
33. A GIS for waste disposal site selection. Midlands Regional Research Laboratory Series, Working Report 7, 21 pp (Maguire, Mesev) 1991

Plus 12 Book Reviews and Conference Reports

Presentations

1. Identification and characterization of urban neighborhood features: fusion of IKONOS imagery and point-based property information. AAG Philadelphia, 2004
2. Neighbourhood reconstruction: links between IKONOS imagery and precision geo-coded address information. *European Colloquium on Theoretical & Quantitative Geography*, Lucca, Italy, 2003
3. Urban land use reconstruction: image pattern recognition from address point information, *Remote Sensing of Urban Areas*. Regensburg, Germany, 2003
4. Urban morphology reconstruction: linking satellite imagery with address information. AAG, New Orleans, 2003, chair
5. Bayesian image classification of urban spatial structures, *International Conference on Bayesian Statistics*. Tenerife, Spain, 2002
6. Fear as the limiting factor in consumer and labour spatial interactions in Belfast, Northern Ireland. *European Colloquium on Theoretical & Quantitative Geography*, St. Valery-en-Caux, France, 2001, chair

7. Morphology from ADDRESS-POINTS. AAG, Pittsburgh, 2000
8. GIS in local economic development: examples from the Irish border and an English city, Invited speaker. *4th International Seminar on Geographic Information Systems in Local Government*, Seoul, Korea, 1999 panelist
9. Spatial analysis of urban remote sensing. AAG, Boston, 1998
10. Fractal analysis of urban density gradients. *Geocomputation International*, Bristol, UK, 1998
11. Regional density gradients from spatial remote sensing. *ASPRS/RTI Annual Conference*, Tampa, 1998
12. Urban regional density gradients. *European Colloquium on Theoretical & Quantitative Geography*, Rostock, Germany, 1997
13. Remote sensing and regional density gradients. *GIS Research UK*, Leeds, UK, 1997 (P Longley and V Mesev)
14. Categorization of settlements. AAG, Fort Worth, 1997
15. Analogue models, space filling and urban density. *European Congress of the Regional Science Association*, Zürich, Switzerland, 1996 (P Longley and V Mesev)
16. Modelling classified urban images: spatial and temporal comparisons of four settlements in the UK. *GIS Research UK*, Kent, UK, 1996
17. From measurement to analysis: a GIS/RS approach to urban density changes. *2nd ESF-GISDATA & NSF-NCGIA Summer Institute Geographic Information*, Berlin, Germany, 1996
18. Fractal measurements of classified images, *European Colloquium on Theoretical and Quantitative Geography*. Spa, Belgium, 1995 (P Longley and V Mesev)
19. The use of diverse RS-GIS sources to measure and model urban morphology, *GISDATA: Remote Sensing and Urban Analysis*. Strasbourg, France, 1995 (P Longley and V Mesev)
20. Monitoring the fractal dimensions of urban areas from classified imagery. AAG, Chicago, 1995
21. Fractal measurement of urban morphology using diverse datasets. *European Congress*, Odense, Denmark, 1995 (P Longley and V Mesev)

22. GIS/RS in urban modelling. *Conference on Spatial Modelling and GIS*, Bristol, UK, 1994 (V Mesev and P Longley)
23. The role of image classification in urban density models. *AAG*, San Francisco, 1994
24. The scale perspective and land use classification. *Conference on Geographic Information and Land Use Analysis*, Birkbeck, UK, 1994 (P Longley and V Mesev)
25. Adjustable a priori and a posterior probabilities in urban image classification. seminar: *National Center for Geographic Information and Analysis (NCGIA)*, SUNY, Buffalo, 1993
26. Population prior probabilities in urban image classification. *AAG*, Atlanta, 1993
27. Fractal measurements of a classified image: the case study of Bristol, England. *European Colloquium on Theoretical & Quantitative Geography*, Budapest, Hungary, 1993 (V Mesev, P Longley and M Batty)

Grants and Awards

1. British Academy Overseas Conference Grant (OCG 849) 2004, PI, \$1,000
2. European Union (Interreg IIc) 2000–2002, Co-PI (with P Shirlow and B Graham) \$900,000
3. Office of First Minister & Deputy First Minister (Community Relations Unit) 2000–2002, Co-PI (with P Shirlow, B Murtagh) \$80,000
4. North & West Belfast Health & Social Services Trust (Northern Ireland) 2001, Co-PI (with P Shirlow, P Steele, M Morrissey) \$36,000
5. Citywide Development (Belfast, Northern Ireland) 2000, Co-PI (with P Shirlow, P Steele, M Morrissey) \$25,000
6. British Natural Environment Research Council (GST/02/2241) 1998-1999, Principal Researcher (Co-PI P Longley, M Barnsley, A Luckman) \$580,000
7. British Academy Overseas Conference Grant (OCG 978) 1997, PI, \$400
8. British Royal Geographical Society with Institute of British Geographers 1997, PI, \$600
9. ESF-GISDATA and NSF-NCGIA Summer Institute Fellowship 1996, PI, \$1,200
10. British Leverhulme Trust Fellowship 1995–1997, PI, \$60,000

11. British Economic & Social Research Council Fellowship (H53627501295) 1995–1998, PI, \$90,000
12. British Association for Geographical Information (Student of the Year 1995) \$180
13. British Royal Geographical Society with Institute of British Geographers 1995, PI, \$320
14. Wimpey Waste Management (MRRL Working Paper 7) 1989, Co-PI (with D Maguire) £4,000

Graduate Student Supervision & Committees

PhD *Fractal pattern recognition system for second-order high spatial resolution image data*
Ivan Gault (University of Ulster) 2005

PhD Committee, XiaoHang Liu (UC Santa Barbara) 2003, Christopher Doll (UC London) 2003

MS Spatial metrics of land cover distributions from IKONOS, John Bevington 2004

MS Spatial analysis of conflict-related death distributions in Belfast, Claire Stevens 2004

MS Analysis of sectarian-constrained employee distributions, Michael Graham 2004

MS Classification, NDVI, Tasseled Cap for arid wetland delineation, Andrew Holdsworth 2004

MS Dasymetric population estimation from IKONOS, Laura McGurrian 2004

MS GIS implementation for environmental management in Uganda, Benon Mutungi 2003

MS Using remote sensing to interpret drumlin patterns in NW Ireland, Shelagh Herry 2003

MS Neighborhood pattern recognition using IKONOS and COMPAS, Paul McKenzie 2003

MS Change detection analysis of the north coast, Kefelagn Cherent 2003

MS Modeling sea level rises and storm surges around Strangford Lough, Adrian O'Reilly 2003

MS GIS based explanation of conflict-related deaths in Belfast, Natasha Eames 2003

MS Water quality assessment using Landsat TM imagery, Ivana Barisin 2003

MS GIS and coastal change at Rossnowlagh, Donegal, Gareth Young 2002

MS Post-classification land cover change detection, Richard McMullan 2002

MS Measuring urban morphologies using fractal geometry, Ivan Gault 2002

MS Estimating population and GDP from DMSP-OLS in Africa and Europe, Gerard Wilson 2002

MS Image change detection: peat land farming in Sperrins, Julie Hannaway 2002

MS GIS for salmon habitat management in River Roe catchment, Lindsay Holmes 2001

MS Estimating population of Ireland using DMSP-OLS nighttime data, Elaine Burnside 2001

MS Multi-criteria evaluation of storm impact on electricity network, Marielle Colhoun 2001

MS Estimating population growth using remote sensing and GIS, Peter Hanratty 2001

MS Optimum site selection of wind farms in Donegal: GIS approach, Rosita McFadden 2001

MS Use of GIS to map socio-economic black spots in Belfast, Verity McMahon 2000

MS Spatial analysis of a social problem: JSA in Belfast, Ciaran Higgins 2000

Professional Memberships & Services

Editorial Board of *Computers, Environment & Urban Systems*, since 1997

Association of American Geographers, since 1990

American Society for Photogrammetry and Remote Sensing, since 1991

ISPRS Intercommission Working Group IV/III.2, since 1996

EARSel SIG, Urban Remote Sensing, since 2003

Scientific Committee, Remote Sensing of Urban Areas 2005

Organizing Committee, Conference of Irish Geographers 2002

European Union (Tempus II) Curriculum Development of GIS in Poland 1999–2000

Peer Review Referee of 52 articles and books, including *Computers, Environment and Urban Systems*, *Annals of the Association of American Geographers*, *Professional Geographer*, *Environment and Planning A*, *Environment and Planning B*, *Photogrammetric Engineering & Remote Sensing*, *International Journal of Remote Sensing*, *Remote Sensing of Environment*, *Computers and Geosciences*, *Landscape Research*, *Geoforum*, *Applied Geography*