

YONGWAN CHUN
School of Economic, Political and Policy Sciences
The University of Texas at Dallas
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Educational History

- PhD, August 26, 2007, The Ohio State University, Columbus, Ohio, Geography
Dissertation Title: "Behavioral specifications of network autocorrelation in migration modeling: An analysis of migration flows by spatial filtering"
- MAS, March 19, 2006, The Ohio State University, Columbus, Ohio, Statistics
- MA, February 26, 2002, Seoul National University, Seoul, Korea, Geography Education
- BA, August 30, 1996, Seoul National University, Seoul, Korea, Geography Education

Professional Experience

- Assistant Professor, School of Economic, Political and Policy Sciences, The University of Texas at Dallas, Richardson, Texas (2009-present)
- Clinical Assistant Professor, School of Economic, Political and Policy Sciences, The University of Texas at Dallas, Richardson, Texas (2008-2009)
- Postdoctoral Research Fellow, School of Economic, Political and Policy Sciences, The University of Texas at Dallas, Richardson, Texas (2007-2008)
- Teaching/Research Assistant, Department of Geography, The Ohio State University, Columbus, Ohio (2002-2007)
- Academic Administration Assistant, Department of Geography Education, Seoul National University, South Korea (2001-2002)
- GIS Analyst, Engineer, and Instructor, Department of Technical Support, ESRI Korea Inc., Seoul, Korea (1997-2001)

Research Interests

- Geographic Information System
- Geocomputation
- Geovisualization
- Spatial statistics and spatial econometrics
- Migration and migration modeling
- Network autocorrelation

Professional Memberships

- The Association of American Geographers
- The Regional Science Association International
- Korean-American Association for Geospatial and Environmental Sciences

Awards and Fellowships

- Winner of the Graduate Student Paper Competition, Spatial Analysis and Modeling Specialty Group, 2008, The 104th Annual Meeting of the Association of American Geographers, Boston, MA, April 19
- Invited participant with travel grant, 2008, Student Forum on Science and Technology Policy sponsored by National Academies, Washington, DC, January 4-5
- Recipient of the Summer Research Fund, 2007, Department of Geography, The Ohio State University, Columbus, Ohio

Achievements in Original Achievement, Investigation, and Research

- Journal articles
 - Liu, D. and Y. Chun, 2009, The effects of different classification models on error propagations in land cover change detection, *International Journal of Remote Sensing*, 30(20), pp. 5345-5364.
 - Xiao, N. and Y. Chun, 2009, Visualizing migration flows using Kriskograms, *Cartography and Geographic Information Science*, 36(2), pp. 183-191.
 - Chun, Y., 2008, Modeling network autocorrelation within migration flows by eigenvector spatial filtering, *Journal of Geographical Systems*, 10(4), pp. 317-344.
 - Chun, Y. and Y. Park, 2008, Neighborhood effects and spatial patterns in urban crime: A case study of the City of Dallas, Texas, *Journal of the Korean Urban Geographical Society*, 11(1), pp. 85-99.
 - Chun, Y., 2007, A Bayesian approach to spatial interaction model with spatial random effects for origins and destinations: A case of internal migration within the city of Seoul, *Journal of the Korean Urban Geographical Society*, 10(1), pp. 103-114.
 - Chun, Y., 2004, The pattern of migration in Seoul, South Korea during 1995-2002, *Journal of Geography Education*, Seoul National University Press: Seoul, South Korea, 48, pp. 87-99.
- Conference proceedings
 - Liu, D and Y. Chun, 2008, Simulation analysis of error propagation on land cover change maps: A comparison of contextual and non-contextual models, In *Proceedings of the 8th International Symposium on Spatial Accuracy Assessment in Natural Resources and Environment Sciences*, pp. 405-411.
 - Chun, Y., R. Bivand, and M. Tiefelsdorf, 2005, Using open source data analysis environments for prototyping modeling implementations for spatial data: Weights in R, In *Proceedings of the 8th International Conference on GeoComputation* [CD-Rom].
- Invited talks/presentations/workshop
 - 2008, "Spatial filtering workshop" sponsored by *National Science Foundation*, School of Economic, Political and Policy Sciences, The University of Texas at Dallas, Richardson, TX, June 16-20.

- 2008, "Network autocorrelation in migration flows", Department of Geography and Planning, The University of Akron, Akron, OH, February 22.
- 2008, "Modeling spatial dependencies with and in inter-regional flows: A spatial filtering approach", Department of Civil, Architectural and Environmental Engineering, The University of Texas at Austin, Austin, Texas, February 8 (Griffith, Tiefelsdorf, and Chun).
- 2007, "A spatial filtering approach in modeling network autocorrelation among migration flows", School of Economic, Political and Policy Sciences, The University of Texas at Dallas, Richardson, Texas, July 2.
- 2007, "Analyzing Spatial Data with R" (by Bivand), A workshop at the 103rd Annual Meeting of the Association of American Geographers, San Francisco, California, April 17 (Lab assistant).
- 2001, "Introduction to GIS", The Institute of the Study of Educational Administration, Seoul National University, South Korea, August.
- Papers presented at professional meetings
 - 2009, "Modeling traffic accident counts based on network links: a panel data analysis", The 56th Annual North American Meetings of the Regional Science Association International, San Francisco, California, November 20 (Kim, C., Y. Chun, and H. Kim).
 - 2009, "From Data to Action: Evaluating Simulation Data in Agent-Based Models", North American Association for Computational Social and Organization Sciences (NAACSOS), Tempe, Arizona, October 24 (Kim, Y., and Y. Chun).
 - 2009, "The Interplay of Certainty, Severity, and Celerity in Punishment for Wrongdoing: Fraud Control in Public Service Delivery", The 10th Public Management Research Association Conference, Columbus, Ohio, October 03 (Kim, Y., W. Zhong, and Y. Chun).
 - 2009, "Modeling network autocorrelation in space-time panel data: An eigenvector spatial filtering approach", The 105th Annual Meeting of the Association of American Geographers, Las Vegas, Nevada, March 26 (Chun and Griffith).
 - 2009, "Eigenvector selection with stepwise regression techniques to construct spatial filters", The 105th Annual Meeting of the Association of American Geographers, Las Vegas, Nevada, March 25 (Griffith and Chun).
 - 2009, "An examination of network autocorrelation on urban traffic volume", The 105th Annual Meeting of the Association of American Geographers, Las Vegas, Nevada, March 25 (Kim, C. and Y. Chun).
 - 2008, "The p -values of Local Moran's I_i to explore spatial patterns", The 55th Annual North American Meetings of the Regional Science Association International, New York, New York, November 21 (Chun and Tiefelsdorf).
 - 2008, "Eigenvector selection with stepwise regression techniques to construct spatial filters", The 55th Annual North American Meetings of the Regional Science Association International, New York, New York, November 21 (Griffith and Chun).
 - 2008, "Simulation analysis of error propagation on land cover change maps: a comparison of contextual and non-contextual models", The 8th International Symposium on Spatial

- Accuracy Assessment in Natural Resources and Environmental Science, Shanghai, China, June 25 (Liu and Chun).
- 2008, "Spatial filtering of bladder cancer mortalities by Poisson regression", The 104th Annual Meeting of the Association of American Geographers, Boston, Massachusetts, April 17 (Madrid, Chun, and Tiefelsdorf).
- 2008, "Modeling network autocorrelation within migration flows by spatial eigenvectors", The 104th Annual Meeting of the Association of American Geographers, Boston, Massachusetts, April 17.
- 2007, "Modeling network autocorrelation among migration flows by spatial eigenvector filtering", The 103rd Annual Meeting of the Association of American Geographers, San Francisco, California, April 21.
- 2006, "Estimating Auto-Poisson regression models by spatial eigenvector filtering", The 102nd Annual Meeting of the Association of American Geographers, Chicago, Illinois, March 11, In an organized session on "Perspectives on Spatial Data Analysis: A Session in Honor of Arthur Getis" (Chun and Tiefelsdorf).
- 2005, "Using open source data analysis environments for prototyping spatial modeling implementations in R", The 8th International Conference on GeoComputation, Ann Arbor, Michigan, August 02 (Chun, Bivand, and Tiefelsdorf).
- 2005, "Spatial filtering by eigenvectors in iteratively re-weighted regression models", The 101st Annual Meeting of the Association of American Geographers, Denver, Colorado, April 9 (Chun and Tiefelsdorf).
- 2004, "Local effects of misspecifications in spatial interaction models", The 100th Annual Meeting of the Association of American Geographers, Pennsylvania March (Tiefelsdorf and Chun).
- 2003, "Analyzing the spatial pattern of crime in Seoul, South Korea", The 99th Annual Meeting of the Association of American Geographers, New Orleans, Louisiana, March.
- Book reviews

Chun, Y., 2009, A joint review of *Encyclopedia of Geographic Information Science* (K. Kemp ed., 2008, Los Angeles: SAGE Publications), and *Encyclopedia of GIS* (S. Shekar and H. Hong eds., 2008, New York: Springer), *Annals of the Association of American Geographers*, 99(3), pp. 635-636.
 - Works in progress

Kim, Y., W. Zhong, and Y. Chun, The interplay of certainty, severity, and celerity of punishment on wrongdoing.

Qiu, F., H. Sridharan, and Y. Chun, Spatial autoregressive models for population estimation at the block level using LIDAR derived volume information.

Chun, Y and D. Griffith, Modeling network autocorrelation in space-time migration flow data: An eigenvector spatial filtering approach.

Professional and University Citizenship

- Professional activities and committees
 - Editorial Assistant, *Geographical Analysis*, 2008 - present
 - Review Committee, Pixoneer Scholarship Awards, Korean-American Association for Geospatial and Environmental Sciences, 2009
 - Paper reviews:
 - Cartography and Geographic Information Science
 - Computers & Geosciences
 - Urban Geography
 - Conference session chair
 - Associations of American Geographers Annual Meeting: Boston (2008); Las Vegas (2009)

- Courses and other curricula taught at The University of Texas at Dallas
 - GISC 6326: Geovisualization
 - GISC 6379: Special Topics: Geovisualization
 - GISC 6388: GIS Application Development
 - GISC 7361: Spatial Statistics

- Courses and other curricula taught at The Ohio State University
 - Geog 200: World Regional Geography (TA)
 - Geog 580: Elements of Cartography (lab instructor)
 - Geog 687: Design and Implementation of Geographic Information Systems (lab instructor)
 - Geog 883.01: Application of Quantitative Methods in Geography I (lab instructor)
 - Geog 883.02: Application of Quantitative Methods in Geography II (lab instructor)