

# David C. Folch

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## Education

- 2012 Ph.D. Geography. Arizona State University, Tempe, Arizona.
- 2005 M.A. Economics. George Washington University, Washington, DC.
- 1996 B.S. Economics. Arizona State University, Tempe, Arizona.

## Academic Experience

- 2014– Assistant Professor. Department of Geography, Florida State University; Tallahassee, Florida.
- 2018– Research Associate. Center for Demography and Population Health, Florida State University; Tallahassee, Florida.
- 2012– Research Associate. Institute of Behavioral Science, University of Colorado Boulder; Boulder, Colorado.
- 2008–2012 Graduate Research Assistant. GeoDa Center, School of Geographical Sciences and Urban Planning, Arizona State University; Tempe, Arizona.
- 2005–2008 Graduate Teaching Associate. Department of Geography, San Diego State University; San Diego, California.
- 2005 Research Assistant. School of Public Policy and Public Administration, George Washington University; Washington, DC.

## Publications

- 2018 Alex Singleton, Seth E. Spielman, and David C. Folch. *Urban Analytics*. Sage, 2018.
- 2018 Jason R. Jurjevich, Amy L. Griffin, Seth E. Spielman, David C. Folch, Meg Merrick, and Nicholas N. Nagle. Navigating statistical uncertainty: How urban and regional planners understand and work with American Community Survey (ACS) data for guiding policy. *Journal of the American Planning Association*, 84(2):110–124, 2018.
- 2017 David C. Folch, Seth E. Spielman, and Robert Manduca. Fast food data: Where user generated content works and where it does not. *Geographical Analysis*, (accepted).
- 2017 Jennifer Kitson, Stephen Buckman, and David C. Folch. Beyond rail: Amenity driven high density development (ADHD) for polycentric cities. In Nicholas Wise and Julie Clark, editors, *Urban Transformations*. Routledge, 2017.
- 2016 David C. Folch, Daniel Arribas-Bel, Julia Koschinsky, and Seth E. Spielman. Spatial variation in the quality of American Community Survey estimates. *Demography*, 53(5):1535–1554, 2016.
- 2016 David C. Folch and Sergio J. Rey. The centralization index: A measure of local spatial segregation. *Papers in Regional Science*, 2016.
- 2015 Seth E. Spielman and David C. Folch. Reducing uncertainty in the American Community Survey through data-driven regionalization. *PLoS ONE*, 10(2), 2015.
- 2015 Seth E. Spielman and David C. Folch. Mapping attribute space with the Kohonen self organizing map algorithm. In Alex Singleton and Chris Brunsdon, editors, *Geocomputation: A Practical Primer*. Sage, 2015.
- 2015 Arti Mann, David C. Folch, Robert J. Kauffmann, and Luc Anselin. Spatial and temporal trends in IT outsourcing. *Applied Geography*, 63:192–203, 2015.

- 2015 Juan Carlos Duque, Xinyue Ye, and David C. Folch. spMorph: An exploratory space-time analysis tool for describing processes of spatial redistribution. *Papers in Regional Science*, 94:629–651, 2015.
- 2014 David C. Folch and Seth E. Spielman. Identifying regions based on flexible user defined constraints. *International Journal of Geographic Information Science*, 28(1):164–184, 2014.
- 2014 Seth E. Spielman, David C. Folch, and Nicholas N. Nagle. Patterns and causes of uncertainty in the American Community Survey. *Applied Geography*, 46:147–157, 2014.
- 2011 Sergio J. Rey and David C. Folch. Impact of spatial effects on income segregation indices. *Computers, Environment and Urban Systems*, 35(6):431–441, 2011.
- 2011 Sergio J. Rey, Luc Anselin, David C. Folch, Daniel Arribas-Bel, Myrna L. Sastré Gutiérrez, and Lindsey Interlante. Measuring spatial dynamics in metropolitan areas. *Economic Development Quarterly*, 25(1):54–64, 2011.

## Grants

- 2016–2023 Early Life Stress and the Environmental Origins of Disease: A Population-based Prospective Longitudinal Study of Children in Rural Poverty. Co-Investigator (PI Clancy Blair with 25 other Co-Is). National Institutes of Health.
- 2017–2019 Neighborhood Influences on the Quality of Child Care Centers in North Carolina. Co-Principal Investigator (PI Beth M. Phillips, Co-PI Sharon Koon). Institute of Education Sciences.
- 2011–2018 Spatial Sciences Census Research Node (NSF-Census Research Network). Principal Investigator (2015–2018) (Co-PI Seth E. Spielman, Nicholas Nagle). National Science Foundation.
- 2013–2017 Measuring Social Vulnerability – Reducing Uncertainty and Validating Indicators Grant. Senior Personnel (PI Seth E. Spielman). National Science Foundation.
- 2015 Pseudo Margins of Error for Metrics Based on American Community Survey Data. Principal Investigator. Florida State University.
- 2011–2012 Doctoral Dissertation Research: Residential Segregation Measures and Their Spatial Properties. Co-Principal Investigator (PI Sergio J. Rey). National Science Foundation.

## Presentations

- 2017 David C. Folch. *Quantity vs. Size: Defining Neighborhoods for Metro Area Comparisons*. North American Meetings of the Regional Science Association International, Vancouver, British Columbia, 2017.
- 2017 David C. Folch. *Neighbors: The MAF provides new insights into the spatial organization of the American population*. NSF Census Research Network Spring 2017 Meeting, Washington, D.C., 2017.
- 2017 David C. Folch. *Fast Food Data: Where User-Generated Content Works and Where It Doesn't*. Social Media and Research Symposium, Tallahassee, Florida, 2017.
- 2016 David C. Folch. *Remapping the American Community Survey*. Florida State University Center for Demography and Population Health, Tallahassee, Florida, 2016.
- 2016 David C. Folch. *Computing Pseudo Margins of Error Using American Community Survey Data*. Association of American Geographers Annual Meeting, San Francisco, California, 2016.
- 2016 David C. Folch. *Uncertain Uncertainty*. Florida State University Department of Geography, Tallahassee, Florida, 2016.
- 2015 David C. Folch. *Downloading and Plotting U.S. Census Bureau Data Using Python*. Exploring Digital Scholarship: Data, Text, and Tools, Tallahassee, Florida, 2015.
- 2015 David C. Folch. *Remapping the American Community Survey*. Geospatial Statistics, Tools, Data, Practices, Opportunities and Challenges in the Federal Agencies hosted by the Federal Committee on Statistical Methodology, Washington, D.C., 2015.

- 2015 David C. Folch and Seth E. Spielman. *Pseudo Margins of Error for Metrics Based on American Community Survey Data*. North American Meetings of the Regional Science Association International, Portland, Oregon, 2015.
- 2015 David C. Folch. *Outside Your Comfort Zone: A Spatial Analysis of Yelp Reviews*. Association of American Geographers Annual Meeting, Chicago, Illinois, 2015.
- 2014 Seth E. Spielman, David C. Folch, and Robert Manduca. *Fast Food Data: Where User Generated Content Works and Where it Doesn't*. North American Meetings of the Regional Science Association International, Washington, D.C., 2014.
- 2014 David C. Folch and Seth E. Spielman. *A Tool for Regionalizing U.S. Census Data*. Centers for Disease Control and Prevention, Atlanta, Georgia, 2014.
- 2014 David C. Folch. *Teaching spatial analysis using python*. Scientific Computing with Python, Austin, Texas, 2014.
- 2014 David C. Folch. *Rail Transit and its Relationship to Residential Segregation and Redistribution*. Association of American Geographers Annual Meeting, Tampa, Florida, 2014.
- 2014 David C. Folch and Seth E. Spielman. *A Geocomputational Approach to Improving the Quality of American Community Survey Estimates (and Why it Matters)*. U.S. Census Bureau, Suitland, Maryland, 2014.
- 2014 David C. Folch. *Uncertain Uncertainty: Leveraging Spatial Patterns in the Quality of American Community Survey Estimates*. Florida State University Department of Geography, Tallahassee, Florida, 2014.
- 2013 Seth E. Spielman and David C. Folch. *Reducing American Community Survey Margins of Error Through Data Driven Regionalization*. North American Meetings of the Regional Science Association International, Atlanta, Georgia, 2013.
- 2013 David C. Folch. *Spatial Variation in the Quality of American Community Survey Estimates*. University of Colorado Department of Geography, Boulder, Colorado, 2013.
- 2013 David C. Folch. *American Community Survey Sampling and Weighting Mechanics*. Association of American Geographers Annual Meeting, Los Angeles, California, 2013.
- 2013 David C. Folch and Seth E. Spielman. *Region Building and the American Community Survey*. Association of American Geographers Annual Meeting, Los Angeles, California, 2013.
- 2012 David C. Folch and Sergio J. Rey. *Visualizing Local Segregation Using the Centralization Index*. Association of American Geographers Annual Meeting, New York, New York, 2012.
- 2011 David C. Folch and Sergio J. Rey. *The Centralization Index as a Measure of Local Segregation*. North American Meetings of the Regional Science Association International, Miami, Florida, 2011.
- 2011 Sergio J. Rey, Luc Anselin, and David C. Folch. *PySAL: Python Spatial Analysis Library, 1.2*. Association of American Geographers Annual Meeting, Seattle, Washington, 2011.
- 2011 Luc Anselin, David C. Folch, and Daniel Arribas-Bel. *GeoDaSpace: A Tool for Modern Spatial Econometrics*. Association of American Geographers Annual Meeting, Seattle, Washington, 2011.
- 2010 Sergio J. Rey, Luc Anselin, and David C. Folch. *Spatial Econometrics with PySAL and GeoDaSpace*. North American Meetings of the Regional Science Association International, Denver, Colorado, 2010.
- 2010 Sergio J. Rey, Luc Anselin, David C. Folch, Daniel Arribas-Bel, and Myrna L. Sastré Gutiérrez. *Measuring Spatial Dynamics in Metropolitan Areas*. Association of American Geographers Annual Meeting, Washington, D.C., 2010.
- 2009 Sergio J. Rey and David C. Folch. *What Can 70 Million or So Neighborhoods Tell Us about the Performance of Income Segregation Measures?* World Conference of the Spatial Econometrics Association, Barcelona, Spain, 2009.
- 2009 Sergio J. Rey, Luc Anselin, and David C. Folch. *Exploration of Spatial Structure and Linkage Using Spatial Weights Matrices*. Association of American Geographers Annual Meeting, Las Vegas, Nevada, 2009.

- 2008 Sergio J. Rey and David C. Folch. *Segregation Dynamics: Inferential and Dynamic Issues in the Measurement of Segregation*. Spatial Econometrics Association World Conference II, Brooklyn, New York.

## Awards

- 2017 Statistical Partnerships Among Academe, Industry and Government Award. The American Statistical Association.
- 2012 U.S. Census Return Rate Challenge (Data Visualization). Winner (with Charles R. Schmidt and Seth E. Spielman). Kaggle.
- 2009 Anthony J. Brazel Research Examination Award. Arizona State University.
- 2008 University Graduate Fellowship. Arizona State University.

## Service – Academic

- Referee *Annals of the American Association of Geographers; Annals of GIS; Applied Geography; Cityscape; Computers, Environment and Urban Systems; Demography; Environment and Planning A; Environment International; Geographical Analysis; Housing Studies; International Journal of Geographical Information Science; International Regional Science Review; Journal of Geographical Systems; Journal of Transport Geography; Journal of Urban Technology; National Science Foundation (Geography and Spatial Sciences); National Science Foundation (Methodology, Measurement, and Statistics); Papers in Regional Science; Population Research and Policy Review; Proceedings of the Python in Science Conference; Professional Geographer; Public Health Reports; Tijdschrift voor economische en sociale geografie; Transportation Research Board Conference Proceedings; Transactions in GIS; Urban Studies*
- Developer PySAL (Python Spatial Analysis Library). Open source software library in the Python programming language; 2009–2016.
- Developer GeoDaSpace. Free software for spatial econometric model estimation; 2010–2013.
- Member Program Committee. SciPy: Scientific Computing with Python; 2014, 2015, 2016.
- Member Program Committee. North American Meetings of the Regional Science Association International; 2009.
- Member Planning Committee. Arizona Impact Fee Roundtable; 2001.
- Organizer Session Organizer. Association of American Geographers Annual Meeting; 2013, 2015, 2016, 2018.
- Organizer Session Organizer. North American Meetings of the Regional Science Association International; 2014.

## Service – Workshops

- 2013 Teaching Assistant. “Spatial Data Analysis with PySAL and GeoDaSpace” North American Meetings of the Regional Science Association International. Atlanta, Georgia.
- 2009 Instructor. “Spatial Regression Workshop” Crime Mapping Research Conference. New Orleans, Louisiana.
- 2009 Instructor. “Tools for Spatial Analysis” Crime Mapping Research Conference. New Orleans, Louisiana.
- 2008 Teaching Assistant. “Spatial Pattern Analysis Workshop” Center for Spatially Integrated Social Science (CSISS). Santa Barbara, California.
- 2007 Teaching Assistant. “Spatial Perspectives on Analysis for Curriculum Enhancement (SPACE) Workshop” Center for Spatially Integrated Social Science (CSISS). Santa Barbara, California.
- 1998 Resource Consultant. “Meeting the Challenges and Opportunities of Arizona’s Growing Senior Population”. 72nd Arizona Town Hall. Prescott, Arizona.

## Professional Experience

- 2008–2009 Editorial Assistant. *International Regional Science Review*, Tempe, Arizona.  
2004–2005 Market Analyst. Independent Contractor, Washington, DC.  
2004 Graduate Intern. ThinkAZ (formerly: Arizona Center for Public Policy), Phoenix, Arizona.  
1996–2003 Research Associate. ESI Corp, Phoenix, Arizona.

## Teaching Experience

- GEO 5934 GIS Programming. Florida State University. Fall 2014–2017.  
GIS 5106 Advanced Geographic Information Systems. Florida State University. Spring 2015–2018.  
GIS 4043/5101 Geographic Information Systems. Florida State University. Spring 2016.  
GEO 5934 Smart Cities. Florida State University. Fall 2016, Spring 2018.  
GEO 5934 Spatial Data Structures and Algorithms. Florida State University. Spring 2015.  
GEOG 5001 GIS and Spatial Analysis Graduate Seminar. University of Colorado Boulder. Fall 2013.  
GCU 102 Introduction to Human Geography. Arizona State University. Fall 2011, Spring 2012.  
GCU 361 Urban Geography. Arizona State University. Spring 2011.  
GCU 495 Quantitative Methods in Geography. Arizona State University. Summer 2010.

## Professional Associations

Western Regional Science Association  
Association of American Geographers

## Personal Information

Place of Birth: London, England.  
Citizenship: United States of America, United Kingdom.

Tallahassee, March 28, 2018.