

Curriculum Vitae

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Ping Yin

Contact

Department of Geography
University of Mary Washington
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Fredericksburg, VA 22401

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Professional Appointments

2014.8 - present Assistant Professor
Department of Geography
University of Mary Washington, Fredericksburg, VA 22401

2012.8 - 2014.7 Visiting Assistant Professor
Department of Geography
University of North Carolina at Greensboro, Greensboro, NC 27412

2005.8 - 2007.7 Assistant Engineer
Department of Thematic Mapping
National Geomatics Center of China, Beijing 100044, P.R. China

Education

Ph.D. 2007.8 - 2012.8
Department of Geography
University of Georgia
Athens, GA 30602

Dissertation (*manuscript style*): *Geographic Information Systems for Spatial Disease Cluster Detection, Spatio-temporal Disease Mapping, and Health Service Planning*

M.E. 2002.9 - 2005.7
Department of Civil Engineering
Tsinghua University
Beijing 100084, P.R. China

Thesis: *Integrated Framework of Web-based GIS Service*

B.E. 1998.9 - 2002.7
Department of Civil Engineering
Tsinghua University
Beijing 100084, P.R. China

Research Interests

Geographic Information Science
Spatial/spatio-temporal Analysis, Modeling and Simulation
GIS for Health
Spatial Optimization

Publications

Peer Reviewed Journal Articles

Ping Yin (2018). Urban-Rural Inequalities in Spatial Accessibility to Prenatal Care: A GIS Analysis of Georgia, USA, 2000-2010. *Geojournal*, 1-13.
<https://doi.org/10.1007/s10708-018-9884-1>

Ping Yin (2018). Does Better Spatial Access Lead to Better Use of Prenatal Care? A Population Study in Georgia. *The Professional Geographer*, 70(3), 363-373

Ping Yin and Lan Mu (2017). A Hybrid Method for Fast Detection of Spatial Disease Clusters in Irregular Shapes. *Geojournal*, 1-13. doi: 10.1007/s10708-017-9799-2

Ping Yin (2017). Association of High Outdoor Temperature and Full-Term Birth Weight in Georgia, USA, 2000-2006. *Southeastern Geographer*, 57, 179-196

Ping Yin and Lan Mu (2015). An Empirical Comparison of Spatial Demand Representations in Maximal Coverage Modeling. *Environment and Planning B: Planning and Design*, 42, 574-592

Ping Yin, Lan Mu, Marguerite Madden and John E. Vena (2014). Hierarchical Bayesian Modeling of the Spatio-Temporal Patterns of Lung Cancer Incidence Risk in Georgia, U.S., 2000-2007. *Journal of Geographical Systems*, 16, 387-407

Ping Yin and Lan Mu (2012). Modular Capacitated Maximal Covering Location Problem for Optimal Siting of Emergency Vehicles. *Applied Geography*, 34, 247-254

Zhongshi Tang, Shuwei Wang, **Ping Yin**, Zhe Xie, Su Zhang, and Xianze Zhu (2006). The Research and Realization of 3D Terrain Visualization Based on GML3.0 and Direct3D. *Science of Surveying and Mapping*, 31(1), 69-71 (*In Chinese*)

Zhongshi Tang, **Ping Yin**, Zhe Xie, and Shuwei Wang (2005). Exploitation of Manual Distributing Software System with GIS in Telecom. *Telecommunications Science*, 8, 18-22 (*In Chinese*)

Zhongshi Tang, Junfeng Huang, **Ping Yin**, Jinqiang Li, and Liyun Zhu (2004). A Study of the Spatial Information Mapping Models of Historical Land Data. *Remote Sensing for Land and Resources*, 16(2), 68-71 (*In Chinese*)

Zhongshi Tang, Junfeng Huang, Liyun Zhu, Kong Lin, **Ping Yin**, and Shuwei Wang (2004). GML-based Distributed and Generalized Spatial Data Engine. *Geo-information Science*, 6(1), 32-35 (*In Chinese*)

Under Review/ In preparation

Ping Yin. Temporal Aggregation Effect on Spatial Disease Cluster Detection: A Case Study on Low Birth Weight in Georgia. (*In Preparation*)

Conference Proceedings and Presentations

Ping Yin. Spatial Accessibility to Prenatal Care and Its Impact on Service Utilization in Georgia, US: A GIS Approach. Social Research Colloquium, University of Mary Washington. 2018

Ping Yin. Assessing the Impact of Place-Based Spatial Accessibility to Prenatal Care on Service Utilization in Georgia with Geographically Weighted Regression and Multilevel Modeling. AAG Annual Meeting, New Orleans, LA, Apr. 2018

Ping Yin. Spatial Access to Prenatal Care in Georgia in 2000 and 2010. AAG Annual Meeting, Boston, MA, Apr. 2017

Ping Yin. Spatial Accessibility and Prenatal Care Utilization in Georgia. AAG Annual Meeting, San Francisco, CA, Apr. 2016

Ping Yin. Urban Greenness and Low Birth Weight: A Case Study of metropolitan Atlanta, USA. AAG Annual Meeting, Chicago, IL, Apr. 2015

Ping Yin. Temporal Aggregation Effect on Spatial Disease Cluster Detection: A Case Study on Lung Cancer in Georgia. AAG Annual Meeting, Tampa, FL, Apr. 2014

Ping Yin. Effects of Ambient Temperature on Birth Weight in Different Maternal Age Groups in Georgia. AAG Annual Meeting, Los Angeles, CA, Apr. 2013

Ping Yin. An Empirical Comparison of Spatial Demand Representations in Maximal Coverage Modeling. SEDAAG Annual Meeting, Asheville, NC, Nov. 2012

Ping Yin. Hierarchical Bayesian Modeling of the Spatio-temporal Patterns of Lung Cancer Incidence in Georgia (2000-2007) and Their Relationship with Socioeconomic Status. AAG Annual Meeting, New York, NY, Feb. 2012

Ping Yin and Lan Mu. Detecting Disease Clusters in Arbitrary Shapes with a Redesigned Spatial Scan Statistic. The 19th International Conference on GeoInformatics, Shanghai, China, Jun. 2011

Ping Yin and Lan Mu. Detecting Disease Clusters in Arbitrary Shapes with a Redesigned Spatial Scan Statistic. AAG Annual Meeting, Seattle, WA, Apr. 2011

Ping Yin and Lan Mu. A New Spatial Scan Method for Detecting Disease Clusters with Arbitrary Shapes. SEDAAG Annual Meeting, Birmingham, AL, Nov. 2010

Ping Yin and Lan Mu. Use of the Spatial Scan Statistic with a Restricted Likelihood Ratio for Detecting Disease Clusters in Arbitrary Shapes. CDC/ATSDR's 2010 Academic Geography and Public Health Showcase, GA, Nov. 2010

Ping Yin and Lan Mu. Gamma-partition: a Clustering Method for Spatial Point Pattern Analysis. UCGIS Summer Assembly, Hilton Head Island, SC, Jun. 2010

Ping Yin and Lan Mu. Gamma-partition: a Clustering Method for Spatial Point Pattern Analysis. AAG Annual Meeting, Washington D.C., Apr. 2010

Liyun Zhu, Zhongshi Tang, Bochao Mu, and **Ping Yin**. A Design of GIS Spatio-Temporal Data Model in City Planning. *The 9th Convention of China Association for Geographic Information System*, 2005

Liyun Zhu, **Ping Yin**, Shuwei Wang, and Zhe Xie. Research of the Application of IKONOS High-Resolution Satellite Image in Land-Use Classification. *The 8th Convention of China Association for Geographic Information System*, 2004

Zhongshi Tang, Yu Xin, Liyun Zhu, **Ping Yin**, Lin Kong, Shuwei Wang. A Study and Design of Web Image Archetype System (version 0.1). *The 7th Convention of China Association for Geographic Information System*, 2003

Translated Book (English to Chinese)

Zhongshi Tang, Junfeng Huang, **Ping Yin**, Liyun Zhu, Yueguo Wang, Shuwei Wang, and Xiaoyi Li (2004). Geographical Information Systems (Volume 1) – Principles and Technical Issues (Second Edition). *Publishing House of Electronics Industry*

External Grant Applications

2015.11 Use GIS to Analyze Spatial Accessibility and Utilization of Prenatal Care. *Health Resources and Services Administration*. (rejected)

Awards and Honors

2018.1 Faculty Research Grant (2018-2019) (\$4000), awarded by the College of Arts and Sciences at the University of Mary Washington

2017.11 Supplemental Faculty Development Funds (\$1,600), Awarded by the College of Arts and Sciences, The University of Mary Washington

2016.11 Jepson Fellowship (2017-18), awarded by the University of Mary Washington

2016.11 Supplemental Faculty Development Funds (\$1,600), Awarded by the College of Arts and Sciences, The University of Mary Washington

2016.4 Professional development award (\$500) for the external grant application, awarded by the University of Mary Washington

2015.11 Supplemental Faculty Development Funds (\$1,950), Awarded by the College of Arts and Sciences, The University of Mary Washington

2014.12 Supplemental Faculty Development Funds (\$1,300), Awarded by the College of Arts and Sciences, The University of Mary Washington

2011.4 Travel Grant (\$900) for Presenting a Paper on AAG Annual Conference, Awarded by the Graduate School, The University of Georgia

2011.3 Dissertation Completion Award (\$12,800 for one year), Awarded by the University of Georgia

2011.2 Clarke County Geographical Society Travel Award (\$700)

- 2010.12 Graduate School Dean's Award in Social Sciences (\$1,000), Awarded by the University of Georgia
- 2010.6 Student Paper Award and Travel Grant (\$1,000) for Student Paper Competition in UCGIS Summer Assembly, Awarded by UCGIS
- 2010.4 Travel Grant (\$360) for Presenting a Paper on AAG Annual Conference, Awarded by the Graduate School, The University of Georgia
- 2004.9 Academic Excellence Scholarship, Awarded by the Tsinghua University
- 2003.9 Academic Excellence Scholarship, Awarded by the Tsinghua University
- 2001.9 Scholarship for Outstanding Artistic Performance, Awarded by the Tsinghua University
- 2000.9 Scholarship for Outstanding Artistic Performance, Awarded by the Tsinghua University
- 1999.9 Academic Excellence Scholarship, Awarded by the Tsinghua University

Projects

- 2006.4 – 2007.7 Application of Spatial Information Grid in the Industry of Surveying and Mapping
- 2006.8 – 2007.7 E-government GIS System for Managing Multi-type and Multi-temporal Distributed Geo-spatial Databases
- 2005.8 – 2006.2 Location-Based Sports Information Management Web System Demo
- 2005.6 – 2005.8 National Land Resource Remote Sensing Survey Data Integration and Information System
- 2003.12 – 2005.1 Pipe/line Resource Management System for Beijing Communication Corporation
- 2003.10 – 2003.12 E-government Platform Demo for China Ministry of Land and Resources

Teaching Experience

Assistant Professor (2014–present)

Department of Geography, University of Mary Washington

- GISC200 Geographic Information Systems
- GISC351 Spatial Analysis with GIS (*Cross-listed with GEOG351*)
- GEOG351 Spatial Analyses, Data Models, and Modeling (*Cross-listed with GISc351*)
- GISC490 Independent study
- MSGA510 Spatial thinking (*Co-taught with other faculty members*)
- MSGA570 Geospatial Intelligence
- MSGA580 Geospatial Data and Services on the Web
- MSGA595 Capstone

Visiting Assistant Professor (2012–2014)

Department of Geography, University of North Carolina at Greensboro

- GEO121 Introduction to Geographic Information Science
- GEO358 Geographic Information Systems
- GEO603 Understanding Geographic Information Systems
- GEO613 Advanced Geographic Information Systems

Teaching Assistant (2007–2011)

Department of Geography, University of Georgia

- GEOG 4/6370L Lab for Introduction to GIS
- GEOG 4/6570L Lab for Advanced GIS
- GEOG 3510L Lab for Cartography and Graphics
- GEOG 4/6590L Lab for Programming for GIS

Professional Services**Master's Thesis/Capstone Committees***As advisor*

- 2018 (1): *Justin Safarik*
- 2017 (2): *Stephanie Seay; Richard Lafleur*
- 2015-2016 (3): *Kelly Wheaton; Jocelyn Lowzik; Bryce Yong*

As committee member

- 2017-2018 (1): *Kristine Hooks*
- 2016-2017 (5): *Gerald Bernhardt; Gelisa Slyer; Christopher Petroff; Peter McPhail; Jacob Snyder*
- 2015-2016 (3): *Colin Chaddock; Clare Rodenberg; Paul Rabatin*
- 2013 (2 at UNCG): *April Frake; Zachary Levine*

University/College Committees

- 2016-2019 University Student Affairs & Campus Life Advisory Committee (Chair, 2017)
- 2016-2019 CAS Faculty Development & Grants Committee (Secretary, 2017)

Departmental Services*Faculty search committee*

- 2016 Tenure-track GIS assistant professor position in Geography
- 2015 One-year visiting assistant professor position in Geography

MSGA workgroup

- 2016.9 Reviewing the proposed accelerated MSGA program
- 2016.5 Exhibiting at the GEOINT 2016 Conference in Orlando, FL for marketing the MSGA program

- 2014-Present Reviewing applications for MSGA program and serving as academic advisor for some MSGA students

Others

- 2016.12 Building HTML web pages for the UMW's GARDEN project website
- 2016.10 Proposing new Web GIS course (GISC 482) (*approved*)
- 2016.9 Reviewing the AAG AP course in GIS&T
- 2016.9 Developing ArcGIS License Code Management web system and deployed it on the UMW's GIS server to serve the campus
- 2016.6 Providing technical suggestions to Dr. Steve Hanna regarding his web GIS application

Grant/Journal Reviewers (18 reviews in total)

- *National Science Foundation (NSF) Proposal (Geography and Spatial Sciences Program)*: 2016(1)
- *Transactions in GIS*: 2016(2), 2015(2)
- *The Professional Geographers*: 2016(1)
- *Geographic Analysis*: 2016(1)
- *Computers, Environment and Urban Systems*: 2018(1), 2017(1), 2016(1), 2014(1)
- *Environment and Planning B: Planning and Design*: 2015(1)
- *International Journal of Disaster Risk Reduction*: 2013(1)
- *Knowledge-based Systems*: 2012(2)
- *International Journal of Digital Earth*: 2017(1)
- *Southeastern Geographer*: 2017(1)
- *ISPRS Annual Conference*: 2015(1)

Academic Conferences

- Chairing the Health GIS session in the 19th International Conference on GeoInformatics in Shanghai, China in Jun 2011.
- Volunteering on the GIS Help Day Sponsored by the UGA Student Chapter of ASPRS in 2008
- Organizing the nationwide Workshop on Applications of Spatial Information Grid in Beijing, China in Dec. 2006
- Volunteering in the International Society of Photogrammetry and Remote Sensing (ISPRS) Workshop in Hangzhou, China in Oct. 2005

Affiliations

- Association of American Geographers (AAG) member
- International Association of Chinese Professionals in Geographic Information Sciences(CPGIS) member

Professional Training and Skills**Computer Skills**

GIS & Remote Sensing	<i>ArcGIS(ArcObjects), ArcEngine, ArcView, MapInfo, Erdas Imagine, GeoDa, GeoVista, STIS</i>
Programming	<i>C#, Python, Java, JSP, ASP.NET, ASP, VB</i>
Web Development	<i>HTML, XML, JavaScript, ArcGIS Server, ArcIMS, MapXtreme</i>
Database	<i>Oracle, MS SQL Server, MS Access, ArcSDE</i>
Statistics & Optimization	<i>R, Stata, SPSS, WinBUGS, SaTScan, CPLEX</i>
Software Engineering	<i>Rational Rose, Power Designer</i>
Agent-based Modeling	<i>Repast, NetLogo</i>

Language Skills Fluent in Chinese and English