

Curriculum Vitae

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Ping Yin

Contact Department of Geography
University of Mary Washington
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Professional Appointments

2019.8 - present Associate Professor
Department of Geography
University of Mary Washington, Fredericksburg, VA 22401

2014.8 - 2019.7 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

M.E. *2002.9 - 2005.7*
Department of Civil Engineering, Tsinghua University, Beijing, China

B.E. *1998.9 - 2002.7*
Department of Civil Engineering, Tsinghua University, Beijing, China

Research Interests

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

Publications

Peer Reviewed Articles

Ping Yin (2020). Kernels and Density Estimation. *The Geographic Information Science & Technology Body of Knowledge* (1st Quarter 2020 Edition), John P. Wilson (ed.). DOI: 10.22224/gistbok/2020.1.12

Ping Yin (2019). Comparison of Greenness Measures in Assessing the Association Between Urban Residential Greenness and Birth Weight. *Urban Forestry & Urban Greening*, 46, 126519

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. Matching geotagged social media data with public health registries at the individual level. (*Under review*)

Conference Proceedings and Presentations

- 2019 **Ping Yin.** Urban greenness and birth weight: A comparative study of greenness measures. *AAG Annual Meeting*, Washington, DC.
- 2018 **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.
- 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.
- 2017 **Ping Yin.** Spatial Access to Prenatal Care in Georgia in 2000 and 2010. *AAG Annual Meeting*, Boston, MA.
- 2016 **Ping Yin.** Spatial Accessibility and Prenatal Care Utilization in Georgia. *AAG Annual Meeting*, San Francisco, CA.
- 2015 **Ping Yin.** Urban Greenness and Low Birth Weight: A Case Study of metropolitan Atlanta, USA. *AAG Annual Meeting*, Chicago, IL.
- 2014 **Ping Yin.** Temporal Aggregation Effect on Spatial Disease Cluster Detection: A Case Study on Lung Cancer in Georgia. *AAG Annual Meeting*, Tampa, FL.
- 2013 **Ping Yin.** Effects of Ambient Temperature on Birth Weight in Different Maternal Age Groups in Georgia. *AAG Annual Meeting*, Los Angeles, CA.
- 2012 **Ping Yin.** An Empirical Comparison of Spatial Demand Representations in Maximal Coverage Modeling. *SEDAAG Annual Meeting*, Asheville, NC.
- 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.
- 2011 **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.
- Ping Yin** and Lan Mu. Detecting Disease Clusters in Arbitrary Shapes with a Redesigned Spatial Scan Statistic. *AAG Annual Meeting*, Seattle, WA.
- 2010 **Ping Yin** and Lan Mu. A New Spatial Scan Method for Detecting Disease Clusters with Arbitrary Shapes. *SEDAAG Annual Meeting*, Birmingham, AL.
- 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*, Atlanta, GA.

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

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

2005 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*, China.

2004 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*, China.

2003 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*, China.

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

Awards and Honors

2019 Faculty Research Grant (2019-2020) (\$4000), Awarded by the College of Arts and Sciences at the University of Mary Washington

2018 Supplemental Faculty Development Funds (\$1,475), Awarded by the College of Arts and Sciences, The University of Mary Washington

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

2017 Supplemental Faculty Development Funds (\$1,600), Awarded by the College of Arts and Sciences, The University of Mary Washington

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

2015 Supplemental Faculty Development Funds (\$1,950), Awarded by the College of Arts and Sciences, The University of Mary Washington

- 2014 Supplemental Faculty Development Funds (\$1,300), Awarded by the College of Arts and Sciences, The University of Mary Washington
- 2011 Travel Grant (\$900) for Presenting a Paper on AAG Annual Conference, Awarded by the Graduate School, The University of Georgia
- Dissertation Completion Award (\$12,800 for one year), Awarded by the University of Georgia
- Clarke County Geographical Society Travel Award (\$700)
- 2010 Graduate School Dean's Award in Social Sciences (\$1,000), Awarded by the University of Georgia
- Student Paper Award and Travel Grant (\$1,000) for Student Paper Competition in UCGIS Summer Assembly, Awarded by UCGIS
- Travel Grant (\$360) for Presenting a Paper on AAG Annual Conference, Awarded by the Graduate School, The University of Georgia
- 2004 Academic Excellence Scholarship, Awarded by the Tsinghua University
- 2003 Academic Excellence Scholarship, Awarded by the Tsinghua University
- 2001 Scholarship for Outstanding Artistic Performance, Awarded by the Tsinghua University
- 2000 Scholarship for Outstanding Artistic Performance, Awarded by the Tsinghua University
- 1999 Academic Excellence Scholarship, Awarded by the Tsinghua University

Teaching Experience

Assistant Professor (2014–present)

Department of Geography, University of Mary Washington

- GISC200 Geographic Information Systems
- GISC351/GEOG351 Spatial Analysis with GIS
- GISC482 Web GIS: Concepts & Application
- GISC490 Independent Study
- MSGA510 Spatial Thinking (*Co-taught with other faculty members*)
- MSGA570 Geospatial Intelligence
- MSGA571A GIS in Public Health
- MSGA580 Web GIS and Programming

- MSGA591 Independent Study
- MSGA595 Capstone
- IDIS300P COVID-19 in Context

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

University/College Committees

- 2020-23 University Honors Program Committee
- 2016-19 University Student Affairs & Campus Life Advisory Committee (Chair, 2017)
- 2016-19 CAS Faculty Development & Grants Committee (Secretary, 2017)

Master's Thesis/Capstone Committees

- As advisor (13 students)
- As committee member (17 students)

Departmental Services

Faculty search committee

- 2018 Office manager position for Geography and Sociology & Anthropology
- 2016 Tenure-track GIS assistant professor position in Geography
- 2015 One-year visiting assistant professor position in Geography

MSGA workgroup

- 2014 ~ Reviewing applications for MSGA program and serving as academic advisor for some MSGA students
- 2016 Reviewing the proposed accelerated MSGA program

Exhibiting at the GEOINT Conference in Orlando, FL for marketing the MSGA program

Development of Web systems

- 2016 ~ Independently developing, deploying, and maintaining the ArcGIS License Code Management web system to serve the campus
- 2016 Independently building HTML web pages for the UMW's GARDEN project website

Others

- 2016 Reviewing the AAG's proposal of AP course in GIS&T
- Providing technical suggestions to Dr. Steve Hanna regarding his web GIS application

Grant/Journal Reviewers (21 reviews in total, 2012-2021)

- *National Science Foundation (NSF) Proposal (Geography and Spatial Sciences Program): 2016(1)*
- *Applied Geography: 2020(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)*
- *International Journal of Health Policy and Management: 2019(1)*
- *Computers & Operations Research: 2020(1)*
- *ISPRS Annual Conference: 2015(1)*

Academic Conferences

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

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