

## Shaowen Wang

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### Professional Preparation

The University of Iowa, USA	Geography	PhD, 2004
The University of Iowa, USA	Computer Science	MCS, 2002
Peking University, P. R. China	Geography	MS, 1998
Tianjin University, P. R. China	Computer Engineering	BS, 1995

### Appointments

2010 – present	Associate Director for CyberGIS, NCSA
2010 – present	Associate Professor (with tenure), UIUC
2007 – present	Senior Research Scientist, NCSA
2007 – 2010	Assistant Professor, Department of Geography, School of Earth, Society, and Environment, UIUC
2005 – 2007	Research Scientist, Academic Technologies - Research Services, the University of Iowa
2004 – 2007	Adjunct Assistant Professor, Department of Geography, The University of Iowa
2002 – 2005	Assistant Research Scientist, Academic Technologies - Research Services, the University of Iowa

### Closely Related Products

- [1] **Wang, S.**, Anselin, L., Bhaduri, B., Crosby, C., Goodchild, M. F., Liu, Y., and Nyerges, T. L. 2013. "CyberGIS Software: A Synthetic Review and Integration Roadmap." *International Journal of Geographical Information Science*, DOI:10.1080/13658816.2013.776049
- [2] Wright, D. J. and **Wang, S.** 2011. "The Emergence of Spatial Cyberinfrastructure." *Proceedings of the National Academy of Sciences*, 108 (14): 5488–5491
- [3] **Wang, S.** 2010. "A CyberGIS Framework for the Synthesis of Cyberinfrastructure, GIS, and Spatial Analysis." *Annals of the Association of American Geographers*, 100 (3): 535-557
- [4] **Wang, S.** and Liu, Y. 2009. "TeraGrid GIScience Gateway: Bridging Cyberinfrastructure and GIScience." *International Journal of Geographical Information Science*, 23 (5): 631-656
- [5] **Wang, S.**, Liu, Y., Wilkins-Diehr, N., and Martin, S. 2009. "SimpleGrid Toolkit: Enabling Geosciences Gateways to Cyberinfrastructure." *Computers and Geosciences*, 35: 2283-2294

## Other Significant Products

- [1] Zhao, Y., Padmanabhan, A., and **Wang, S.** 2013. "A Parallel Computing Approach to Viewshed Analysis of Large Terrain Data Using Graphics Processing Units." *International Journal of Geographical Information Science*, 27 (2): 363-384.
- [2] **Wang, S.**, Wilkins-Diehr, N. R., and Nyerges, T. L. 2012. "CyberGIS – Toward Synergistic Advancement of Cyberinfrastructure and GIScience: A Workshop Summary." *Journal of Spatial Information Science*, 4: 125-148
- [3] Tang, W., **Wang, S.**, Bennett, D. A., and Liu, Y. 2011. "Agent-based Modeling within a Cyberinfrastructure Environment: A Service-Oriented Computing Approach." *International Journal of Geographical Information Science*, 25 (9): 1323-1346
- [4] **Wang, S.** and Armstrong, M. P. 2009. "A Theoretical Approach to the Use of Cyberinfrastructure in Geographical Analysis." *International Journal of Geographical Information Science*, 23 (2): 169-193
- [5] **Wang, S.** and Zhu, X-G. 2008. "Coupling Cyberinfrastructure and Geographic Information Systems to Empower Ecological and Environmental Research." *BioScience*, 58 (2): 94-95

## Synergistic Activities

- Award/Honor: National Science Foundation (NSF) CAREER Award, 2009
- Leadership: Invited talk for Federal Agency and Department Briefing on GIScience and Cyberinfrastructure: Making Connections, February 7, 2008
- Pedagogical: Teaching a number of courses and tutorials in the areas of geographic information science and systems, distributed systems, high performance and parallel computing, and geospatial problem solving
- Software: Author of several software tools and systems in the areas of geographic information systems (GIS), middleware, and parallel and distributed computing applications, including for example, the GISolve Toolkit and CyberGIS Software Environment
- Service: Action Editor of *GeoInformatica* (Springer)

## Collaborators

Luc Anselin (Arizona State University); Timothy Cockerill, John Towns (NCSA/UIUC); Nancy Wilkins-Diehr (San Diego Supercomputer Center); Michael Goodchild (University of California, Santa Barbara); Jun Yan (University of Connecticut); Yan Liu, Anand Padmanabhan, Murugesu Sivapalan, Marc Snir (UIUC); Marc Armstrong, David Bennett (the University of Iowa); Wenwu Tang (University of North Carolina); Timothy Nyerges (University of Washington, Seattle)

## Graduate Advisors

Drs. Marc P. Armstrong and Joseph K. Kearney (the University of Iowa)

## Graduate and Postdoctoral Students Supervised

Graduate: PhD in Computer Science: Anand Padmanabhan (2006, thesis co-advisor with Dr. Sukumar Ghosh, the University of Iowa); PhD in Geography: Eric Shook (2013, UIUC); MS in Computer Science: Babak Behzad (2013, thesis co-advisor with Dr. Marc Snir, UIUC); MS in Geography: Su Y. Han (2012, UIUC), Heejun Kim (2013, UIUC), Chris Korose (2010, UIUC), and Yanli Zhao (2013, UIUC)

Postdoc: Guofeng Cao, Kai Cao (UIUC); Anand Padmanabhan (the University of Iowa); Wenwu Tang (NCSA/UIUC); Liang Yu (NCSA/UIUC, co-advisor with Dr. Yong Liu). Total Students = 11