

Guofeng Cao

Curriculum Vitae

Updated: January 2016

Education

- **Ph.D.: Department of Geography** 2011
University of California, Santa Barbara Santa Barbara CA, U.S.A.
 - Specialization: GIScience and Environmental Statistics
 - Dissertation Title: **A Geostatistical Framework for Categorical Spatial Data Modeling**
 - Dissertation (co)Advisors: Phaedon C. Kyriakidis and Michael F. Goodchild
- **M.A.: Department of Statistics and Applied Probability** 2009
University of California, Santa Barbara Santa Barbara CA, U.S.A.
 - Specialization: Applied Statistics
- **M.Sc.: Institute of Geographic Sciences and Natural Resources Research** 2004
Chinese Academy of Sciences Beijing, China
 - Specialization: Cartography and GIS
- **B.Sc.: Department of Earth Sciences** 2001
Zhejiang University Hangzhou, China
 - Specialization: Remote Sensing Geology
- **B.Sc.(Minor): Department of Computer Science** 2001
Zhejiang University Hangzhou, China

Academic Experiences

- **Director** October 2015-
Texas Tech University Lubbock TX, U.S.A.
 - Center for Geospatial Technology
- **Faculty Affiliate** August 2013-
Texas Tech University Lubbock TX, U.S.A.
 - National Wind Institute
- **Assistant Professor** August 2013-
Texas Tech University Lubbock TX, U.S.A.
 - Department of Geosciences
- **Postdoctoral Research Associate** August 2011- August 2013
University of Illinois Urbana IL, U.S.A.
 - CyberInfrastructure and Geospatial Information Laboratory
- **Graduate Research Assistant** 2007 - 2010
University of California, Santa Barbara Santa Barbara CA, U.S.A.

– Department of Geography and Center for Spatial Studies

- **Graduate Research Assistant** Jun.2008 - Sept.2008
Los Alamos National Laboratory Los Alamos NM, U.S.A
– High Energy Physics (T-8) Group
- **Teaching Assistant** 2006 - 2007
University of California, Santa Barbara Santa Barbara CA, U.S.A.
– Department of Geography
- **Research Scientist** July. 2004 - Sept. 2006
Institute of Geographic Sciences and Natural Resources Research Beijing, China
– GIS Industrial Development Center of China, Chinese Academy of Sciences

Industrial Experiences

- **Graduate Research Assistant** Jun.2010 - Sept.2010
TeleNav Inc. Sunnyvale, CA, U.S.A
– Map matching/conflation methods
– Crowd-source traffic data mining for map updating and traffic modeling
- **Graduate Research Assistant** Jun.2007 - Aug.2007
ESRI Inc. Redlands CA, U.S.A
– Geostatistics Group of ESRI
- **Team Leader** Jul. 2001 - Sept. 2006
SuperMap Software Co., Ltd Beijing, China
– As one of the founding contributors to SuperMap software (the leading GIS platform in China), I led the research and development of a national award winning (of China) 3D GIS and spatial analysis software
– Main research efforts include high performance spatial analysis, efficient 3D reconstruction and geovisualization, large scale spatial database and spatial statistics

Honors & Awards

- **National Scientific Technology Progress Award of China (second-class)** 2005
as a member of *SuperMap* China
- **Scholarship for Excellent Students** 1998, 1999, 2000
Zhejiang University Hangzhou, China

Grants

(* indicates the leading principle investigator of the proposal)

Funded:

- USAID: Mappers Without Borders (2015-2019). Amount: **\$999,000**. Role: **co-PI: 17%** (with P. Solis*, K. Mulligan and C. Portillo-Quintero).
- Texas Tech National Wind Institute: Toward a Geospatial Cyberinfrastructure for Enhancement of Community Resilience to Tornado Hazards (2014-2015). Amount: **\$30,500**. Role: **Sole PI: 100%**.
- Texas Tech Transdisciplinary Research Academy: A Big Data Approach for Spatial Environmental Epidemiology (2014-2015). Amount: **\$4,000**. Role: **PI: 45%** (with J. Vanos and Y. Chen).

- USDA: Development of Current Hydrologic Data and Analysis of Water Availability in the Ogallala Aquifer over the Next 50 Years (2014-2016). Amount: **\$119,895**. Role: **co-PI: 25%** (with K. Mulligan* and L. Barbato).
- USDA: Development of a GIS Model to Project and Map Future Water Availability (2015-2016). Amount: **\$40,679**. Role: **co-PI: 20%** (with K. Mulligan* and L. Barbato).
- National Institute on Minority Health and Health Disparities Pilot Research Core: Center of Excellence at Meharry (HDRCOE): The role of climate and air pollution for racial disparities in infant mortality (2014-2015). Amount: **\$12,729**. Role: **co-PI: 10%** (with L. Gittner* and J. Vanos).

Travel Grants:

- NSF Travel Grant: Geocomputation 2015.
- NSF Travel Grant: CyberGIS 2012, 2015.
- NSF Travel Grant: ACM GIS 2011.
- Jack Dangermond Travel Grants, UCSB 2007, 2010, 2011.

Publications

(* indicates corresponding authors and † indicates graduate advisee authors)

In Peer-Reviewed Journals

- Liu, Y.[†], Delahunty, T., Zhao, N. and **Cao, G.** (2016): These lit areas are undeveloped: China's urban extents and urban development patterns from thresholded nighttime light imagery. *International Journal of Applied Earth Observation and Geoinformation* (accepted).
- Luo, F.[†], **Cao, G.***, Mulligan, K. and Li, X. (2016): Explore Spatiotemporal and Demographic Characteristics of Human Mobility via Twitter: A Case Study of Chicago. *Applied Geography* (accepted).
- **Cao, G.**, Wang, S., Hwang, M., Padmanabhan, A., Zhang, Z. and Soltani, K. (2015): A General Framework for Scalable Spatio-temporal Analysis of Location-based Social Media Data, *Computers, Environment and Urban System*.
- Padmanabhan, A., Wang, S., **Cao, G.**, Hwang, H., Zhao, Y., Zhang Z. and Gao Y. (2014), FluMapper: an interactive CyberGIS environment for massive location-based social media data analysis, *Concurrency and Computation: Practice and Experience*, 26(13) 2253-2265.
- **Cao, G.**, Yoo, E.H., Wang, S. (2014): A statistical framework of data fusion for spatial prediction of categorical variables. *Stochastic Environmental Research and Risk Assessment*, 28 1785-1799.
- Leetaru, K., Wang, S., **Cao, G.**, Padmanabhan, A., Shook, E. (2013): Mapping the global Twitter heartbeat: the geography of Twitter. *First Monday*.
- Yoo, E.H., Hoagland, B.W., **Cao, G.** and Fagin, T.D. (2013): Spatial distribution of trees and landscapes of the past: a mixed spatially correlated multinomial logit model approach for the analysis of the Public Land Survey data. *Geographical Analysis*, 45(4), pp.419-440.
- Luo, F., Zhong, E., **Cao, G.**, Tellez, R.D. and Gao, P. (2013): VGIS-AntiJitter: an effective framework of solving jitter problems in virtual geographic information systems *International Journal of Digital Earth*, 6(1), pp.28-50.

- **Cao, G., Kyriakidis, P.C., and Goodchild, M.F. (2012):** Response to ‘Comments on ‘Combining spatial transition probabilities for stochastic simulation of categorical fields’ with communications on some issues related to Markov chain geostatistics’, *International Journal of Geographical Information Science*, 26(10), pp.1741-1750.
- **Cao, G., Kyriakidis, P.C., and Goodchild, M.F. (2011):** A geostatistical framework for categorical spatial data modeling, *The SIGSPATIAL Special*, 2011, 3(3), pp.4-9.
- **Cao, G., Kyriakidis, P.C. and Goodchild, M.F. (2011):** A multinomial logistic mixed model for prediction of categorical spatial data, *International Journal of Geographical Information Science*, 25(12), pp.2071-2086.
- **Cao, G., Kyriakidis, P.C. and Goodchild, M.F. (2011):** Combining spatial transition probabilities for stochastic simulation of categorical fields, *International Journal of Geographical Information Science*, 25(11), pp.1773-1791.
- **Li, K., Zhong, E., Zeng, Z. and Cao, G. (2006):** An optimal path algorithm based on hierarchically structured topographical network, *Journal of Images and Graphics (In Chinese)*, 11(07): 1004-1009.
- **Zhang, X., Zhang, L., Cao, G. and Zhong, E. (2006):** A study on expressing techniques of battlefield situation evolution and variation based on GIS and its application, *Geo-Information Science (In Chinese)*, 8(4).
- **Zhang, L., Zhu, J., Zeng, Z., and Cao, G. (2006):** GRID services for large scale elevation derivatives Computation, *Geo-Information Science (In Chinese)*, 8(2), pp.14-29.
- **Cao, G., Zhang, L. and Zhong, E. (2005):** A discussion on key techniques in 3D GIS rendering engine, *Geo-Information Science (In Chinese)*, 7(1), pp.87-91.

Peer-Reviewed Book Chapters

- **Cao, G.:** Modeling uncertainty in categorical fields, *International Encyclopedia of Geography*. (in press)
- **Wang, S. and Cao, G., Zhang, Z., Zhao, Y., Padmanabhan, A. and Wu, K. (2013):** A CyberGIS environment for analysis of location-based social media data, in *Location-Based Computing and Services, 2nd Edition*, (edited by A. K. Hassan and H. Amin), CRC Press.

Technical Report

- **Cao, G., Kyriakidis, P.C., and Goodchild, M.F.:** On spatial transition probabilities as continuity measures in categorical fields. (Available at: <http://arxiv.org/abs/1312.5391>).

Full Papers In Peer-Reviewed Conference Proceedings

- **Liu, Y.[†], Luo, F.[†] and Cao, G. (2015).** Track Spatiotemporal Spread of Public Concerns on Ebola in the US via Twitter. In Proceedings of Geocomputation 2015 Conference.
- **Luo, F.[†], Cao, G., and Li, X. (2014).** An interactive approach for deriving geometric network models in 3D indoor environments. In Proceedings of the Sixth ACM SIGSPATIAL International Workshop on Indoor Spatial Awareness (pp. 9-16). ACM.
- **Huang, Q., Cao, G., and Wang, C. (2014).** From Where Do Tweets Originate?-A GIS Approach for User Location Inference. In Proceedings of the Seventh ACM SIGSPATIAL International Workshop on Location-based Social Media. ACM.

- **Cao, G.:** A Geostatistical Framework for Heterogeneous Spatatial Data Fusion (2014), in: A. Shortridge, J. Messina, S. Kravchenko and A. Finley (Eds.), *Proceedings of the 11th International Symposium on Spatial Accuracy Assessment in Natural Resources and Environmental Sciences*.
- Hwang, M., Wang, S., **Cao, G.**, Padmanabhan, A. and Zhang, Z.(2013): Spatiotemporal Transformation of Social Media: A Case Study of Twitter for Exploration of Flu Risk Indicators. International Conference on Advances in Geographic Information Systems.
- Padmanabhan, A., Wang, S., **Cao, G.**, Hwang, H., Zhao, Y., Zhang Z. and Gao Y. (2013), FluMapper: an interactive CyberGIS environment for massive location-based social media data analysis. Proceedings of the Conference on Extreme Science and Engineering Discovery Environment: Gateway to Discovery.
- Shook, E. Leetaru, K, **Cao, G.**, Padmanabhan, A and Wang, S. (2012): Happy or not : Generating topic-based geospatial emotional heatmaps for Culturomics using CyberGIS. IEEE 8th International Conference on E-Science, pp. 1-6.
- **Cao, G.**, Wang, S., and Guan, Q. (2012): A state-space model for understanding spatial dynamics represented by areal data *Proceedings of the Seventh International Conference, GIScience 2012*, Columbus, Ohio, September 2012.
- **Cao, G.**, Kyriakidis, P.C., and Goodchild, M.F. (2011): A geostatistical framework for categorical spatial data modeling, in *Proceedings of the 19th ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems*, Chicago, Illinois, November 2011.
- Kyriakidis, P.C. and **Cao, G** (2010): Generating fine resolution area class maps subject to coarser resolution data constraints, in *Proceedings of the Sixth International Conference, GIScience 2010*, Zurich, Switzerland, Sep.14-17,2010.
- **Cao, G.**, Kyriakidis, P.C., and Goodchild, M.F. (2009): Prediction and simulation in categorical fields: a transition probability combination approach, in *Proceedings of the 17th ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems*, Seattle, Washington, November 2009, pp.496-499.
- **Cao, G.**, and Kyriakidis, P.C. (2008): Combining transition probabilities in the prediction and simulation of categorical fields, in: J. Zhang, and M.F. Goodchild (Eds.), *Proceedings of the 8th International Symposium on Spatial Accuracy Assessment in Natural Resources and Environmental Sciences*, Shanghai, China, June 2008, pp.25-32.
- Li, K., Zhong, E., Song, G., **Cao, G.**, Zhang, L. and Wu, Q. (2007): NDF: An effective mobile GIS physical storage model, in *Proceedings of the SPIE 6754, Geoinformatics 2007: Geospatial Information Technology and Applications 67541W (August 07, 2007)* DOI:10.1117/12.764932
- Zhang, X., **Cao, G.** and Zhang, L. (2006): Research and improvement on optimal path analysis algorithm based on cost-distance grid, in *Proceedings of the IEEE International Conference on Geoscience and Remote Sensing Symposium*, Denver, Colorado, Aug 2006, pp.869-871.

In Conference Proceedings (not peer-reviewed)

- **Cao, G.**, Yu, Z., Yang, Z. (2002), Spatially visualized Internet management system based on GIS technologies. *Proceedings of International Conference on Computer Graphics & Spatial Information System*, Beijing, China, August 2002.

Presentations

In Conferences and Symposia (presenter is underlined)

- Cao, G.: Integrating CyberGIS for Spatiotemporal Uncertainty Modeling. *CyberGIS All Hands Meeting*, Reston, VA, September 2015.
- Cao, G.: A Scalable Framework for Scalable Spatiotemporal Analysis of Location-based Social Media Data *Texas Tech University 2015 Symposium on Big Data*, Lubbock, Texas, April 2015.
- Cao, G.: Representing spatiotemporal uncertainty in function spaces. *110th Annual Meeting of the Association of American Geographers*, Chicago, IL, April 2015.
- Ying Liu and Cao, G.: Geostatistical Downscaling of Gridded PM2.5 Concentration Datasets Using Nighttime Light Imagery. *110th Annual Meeting of the Association of American Geographers*, Chicago, IL, April 2015.
- Liu, Y., Luo, F. and Cao, G.: Track Spatiotemporal Spread of Public Concerns on Ebola in the US via Twitter. *The 13th International Conference of Geocomputation*, Dallas, TX, May 2015.
- Luo, F., Cao, G., and Li, X.: An interactive approach for deriving geometric network models in 3D indoor environments. *ACM GIS 2014*, Dallas, Texas, November 2014.
- Huang, Q., Cao, G., and Wang, C.: From Where Do Tweets Originate?-A GIS Approach for User Location Inference. *ACM GIS 2014*, Dallas, Texas, November 2014.
- Cao, G., Wang, S.: A Scalable Framework for Scalable Spatiotemporal Analysis of Location-based Social Media Data *109th Annual Meeting of the Association of American Geographers*, Tampa, FL, April 2014.
- Cao, G.: A Geostatistical Framework for Heterogeneous Spatial Data Fusion, *11th International Symposium on Spatial Accuracy Assessment in Natural Resources and Environmental Sciences*, Lansing, Michigan, July 2014.
- Hwang, M., Wang, S., Cao, G., Padmanabhan, A. and Zhang, Z.: Spatiotemporal Transformation of Social Media: A Case Study of Twitter for Exploration of Flu Risk Indicators. *ACM GIS 2013*, Orlando, Florida, November 2013.
- Cao, G. and Wang, S.: A Statistical Framework for Spatiotemporal Dynamics Modeling. *AAG 2013*, Los Angeles, CA, April 2013.
- Cao, G., Wang, S., and Guan, Q.: A state-space model for understanding spatial dynamics represented by areal data. *GIScience 2012*, Columbus, Ohio, September 2012.
- Cao, G., Wang, S.: A CyberGIS-enabled statistical framework for spatiotemporal data fusion *The First International Conference on Space, Time and CyberGIS*, Champaign, Illinois, August 2012.
- Cao, G., Goodchild, M.F., Wang, S., Kyriakidis, P.C.: A spatial multinomial logistic mixed model for mapping thematic classification uncertainty. *107th Annual Meeting of the Association of American Geographers*, New York City, New York, February 2012.
- Cao, G., Kyriakidis, P.C., Goodchild, M.F.: A geostatistical framework for categorical spatial data modeling. *The 19th ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems*, Chicago, Illinois, November 2011.
- Cao, G., Goodchild, M.F., Kyriakidis, P.C.: A multinomial mixed model for prediction of categorical spatial data. *National Geospatial-Intelligence Agency Academic Research Program Symposium (NARP)*, National Academy of Sciences, Washington, D.C., September 2011.

- **Cao, G.**, Goodchild, M.F., Kyriakidis, P.C.: A computer package for modeling, prediction and simulation of categorical spatial data. *107th Annual Meeting of the Association of American Geographers*, Seattle, WA, April 2011.
- **Marston, J. R.**, **Cao, G.**, Brabyn, J. A. Evaluation of an online mapping program with user-defined map features for persons with low vision. *First European Congress On Visual Impairment*, Valladolid, Spain, October 2010.
- **Cao, G.**, Goodchild, M.F., Kyriakidis, P.C.: A geostatistical framework for geospatial data analysis and modeling across multiple spatial and temporal scales. *National Geospatial-Intelligence Agency Academic Research Program Symposium (NARP)*, National Academy of Sciences, Washington, D.C., September 2010.
- **Kyriakidis, P.C.** and **Cao, G.**: Generating fine resolution area class maps subject to coarser resolution data constraints, in *Proceedings of the Sixth International Conference, GIScience 2010*, Zurich, Switzerland, Sep.14-17,2010
- **Cao, G.**, Kyriakidis, P.C., Goodchild, M.F.: Transition probability-based geostatistical methods for modeling categorical spatial data. *106th Annual Meeting of the Association of American Geographers*, Washinton, D.C., March 2010.
- **Marston, J.R.** and **Cao, G.**: Making geographical information accessible for people with low vision. *106th Annual Meeting of the Association of American Geographers*, Washinton, D.C., March 2010.
- **Cao, G.**, Kyriakidis, P.C., Goodchild, M.F.: Prediction and simulation in categorical fields: A transition probability combination approach. *The 17th ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems*, Seattle, Washington, November 2009.
- **Cao, G.**, Kyriakidis, P.C., Goodchild, M.F.: Prediction and simulation in categorical fields: A transition probability combination approach. *2009 Annual Conference of the International Association for Mathematical Geosciences*, Stanford, CA, August 2009.
- **Cao, G.**, and Kyriakidis, P.C.: Combining transition probabilities in the prediction and simulation of categorical fields. *105th Annual Meeting of the Association of American Geographers*, Las Vegas, NV, March 2009.
- **Cao, G.**, and Kyriakidis, P.C.: Combining transition probabilities in the prediction and simulation of categorical fields, *The 8th International Symposium on Spatial Accuracy Assessment in Natural Resources and Environmental Sciences*, Shanghai, China, June 2008.
- **Cao, G.**: Distributed GIS based on Google's MapReduce. *104th Annual Meeting of the Association of American Geographers*, Boston, MA, April 2008.

In Colloquia

- **Cao, G.**: A Scalable Framework for Scalable Spatiotemporal Analysis of Location-based Social Media Data. *Chinese University of Geosciences*, Wuhan, Hubei, China, June 2014.
- **Cao, G.**: A Scalable Framework for Scalable Spatiotemporal Analysis of Location-based Social Media Data. *Institute of Geographic Research and Natural Resource Research, Chinese Academy of Sciences*, Beijing, China, June 2014.
- **Cao, G.**: A geostatistical framework for categorical spatial data modeling. Department of Geography, University of Illinois at Urbana-Champaign, October 2011.

- **Cao, G.:** Markov chain-based geostatistical methods for modeling categorical spatial data. Geography Department Colloquium, UCSB, October 2007.
- **Marston, J. R., Cao, G., Brabyn, J. A. (2010)** Accessible maps customized for the visually impaired person. Atlanta Vision Seminar, Atlanta, GA

Teaching

Texas Tech University

- GEOG 5330: Applied Spatial and Spatiotemporal Analysis
 - New developed graduate level course and will start to be taught in Fall 2016.
- GEOG 3340: Introduction to Human Geography Research, Fall 2015
 - Fall 2015.
- GIST 4302/5302: Spatial Analysis and Modeling
 - Fall 2013, Spring 2014, Fall 2014, Spring 2015, Fall 2015.

University of Illinois at Urbana-Champaign

- Geog 480: Principles of GIS
 - Spring 2013.
- Course Development of Geog 379 (*on-line course*): Introduction to GIS
 - Summer 2012.

University of California at Santa Barbara

- TA of Geog 183 (for Prof. Martin Raubal): Cartographic Design and Geovisualization
 - Spring 2008.
- TA of Geog 172 (for Prof. Phaedon Kyriakidis): Intermediate Geographical Data Analysis
 - Winter 2007.

Advising and Mentoring

(* indicates serving the Chair of the Committee)

Ph.D. Committees

- Ying Liu*: Department of Geosciences, Texas Tech (in progress).
- Jason Post: Department of Geosciences, Texas Tech (in progress).
- Thu Nguyen: Department of Geosciences, Texas Tech (in progress).
- Marina Fisher-Phelps: Department of Biological Sciences, Texas Tech (in progress).
- Lionel Plummer: Department of Natural Resource Management, Texas Tech (Fall 2014).
Dissertation: *An Examination of Hydrologic Restoration Efforts for Wetland Mitigation Banks.*
Current Employment: Department of Natural Resources Management at Texas Tech.

Ph.D. Dissertation Examiner

- Azadeh Mousavi: Department of Infrastructure Engineering, University of Melbourne.
Dissertation: *Decentralized Data Mining for Event Detection in Spatiotemporal Fields*. (June, 2015)

M.S./M.A. Committees

- Feixiong Luo*: Geography, Department of Geosciences, Texas Tech (in progress).
- Morgan Kraft*: Geography, Department of Geosciences, Texas Tech (in progress).
- Ashley Morris*: Geography, Department of Geosciences, Texas Tech (in progress).
- Vaughn Smith: Department of Natural Resource Management, Texas Tech (in progress).
- Aaron Hardin: Atmospheric sciences, Department of Geosciences, Texas Tech (Summer 2015).
Thesis: *Assessment of Urban Heat Islands During Hot Weather in the U.S. Northeast and Linkages to Microscale Thermal and Radiational Properties*.
- Jason Post: Geography, Department of Geosciences, Texas Tech (Spring 2014). Thesis:
Environmental Inequality in Lubbock Texas. Current: Graduate student at Texas Tech.
- Tiffany Lambert: Geography, Department of Geosciences, Texas Tech (Spring 2014). Thesis:
Analysis of Marine Stratus Surges in the Pacific Northwest. Current Employment: Graduate Academic Advisor at Wayland Baptist University.

University Services

Texas Tech University

- Search Committee of Climate Science position in the Department of Geosciences.
- Organizer of Geography Seminar in the Department of Geosciences.

University of California at Santa Barbara

- Graduate representative in the search Committee of GIS position in the Department of Geography.
- Executive Board of CSSA (Chinese Students and Scholars Association)
- Executive President of CSSA (Chinese Students and Scholars Association)

Professional Services

Refereeing

(n indicates the number of reviews conducted for the corresponding item)

Grants

- NSF Proposal Review (*Geography and Spatial Sciences Program*) (n = 1)

Journals and Conferences

- International Journal of Geographical Information Science (n = 14)
- Applied Geography (n = 1)

- Transactions in GIS (n = 2)
- Geoinformatica (n = 1)
- Journal of Medical Internet Research (n = 2)
- Journal of Geographical Systems (n = 1)
- Computers, Environment and Urban Systems (n = 5)
- Science of Total Environment (n = 1)
- ISPRS International Journal of Geo-Information (n = 1)
- Mathematical Geosciences (n = 2)
- Journal of Marine and Petroleum Geology (n = 1)
- International Journal of Remote Sensing (n = 2)
- Stochastic Environmental Research and Risk Assessment (n = 2)
- XHPC 2012 (n = 1)
- eScience 2012 (n = 1)
- GIScience 2012 (n = 1)
- The 2nd International Workshop on HPDGIS (n = 2)
- The International Workshop on Location-based Social Network (n = 2)
- The 1st International Workshop on Spatiotemporal Computing (n = 1)

Conference Program Committee and Session Organizer

Program Committee

- ACM GIS International Workshop on Location-based Social Networks 2014, 2015
- CyberGIS Symposium, AAG 2015

Session Organizer

- Computational and Statistical Methods for Spatiotemporal Data Analytics, AAG 2012, 2013
- CyberGIS and Digital Epidemiology, AAG 2014
- CyberGIS and Spatiotemporal Uncertainty, AAG 2015, 2016
- Classification Methods and Accuracy Assessment in Land Cover Mapping, AAG 2016

Professional Society Memberships

- Americal Geophysical Union, 2015-
- ACM SIGSPATIAL, 2009-
- Association of American Geographers (AAG) 2007-

- International Association for Mathematical Geosciences, 2009-2010

Technical Skills

Total Experiences: 10+ years

Programing Languages: C/C++, Java, Matlab/Octave, R, Python, MPI

Programing IDE: Eclipse, Visual Studio, gcc/g++, vim

Operating Systems: Linux/Windows/MacOSX

Software Packages: ArcGIS, GDAL/OGR, OpenLayers, Geoserver, Mapnik, SuperMap

Others: Hadoop (MapReduce), MongoDB, Redis, Hive, MySQL, OpenGL, GSLIB, SGeMS, Latex

Media Mentions

- "40 more maps that explain the world" by Washington Post: the 25th map in <https://www.washingtonpost.com/news/worldviews/wp/2014/01/13/40-more-maps-that-explain-the-world/>
- <http://www.poynter.org/news/mediawire/213847/study-twitter-has-a-distinct-geographic-profile-from-mainstream-media/>
- <http://globalnews.ca/news/613788/researchers-map-the-geography-of-twitter-with-geo-referencing/>
- <http://news.abs-cbn.com/lifestyle/06/17/13/manila-among-top-20-most-tweeting-cities>