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CURRICULUM VITAE

Wei Tu, Ph.D.

Associate Professor of Geography
Department of Geology and Geography
Georgia Southern University

CONTACTS

Campus

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Georgia Southern University
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EDUCATION

Ph.D., May 2004

Department of Geography, Texas A&M University, College Station, TX 77845

Dissertation: *Environmental impacts of the digital economy: The case of Austin, Texas, 1990-2008*

Dissertation Advisor: Daniel Z. Sui

M.Sc., June 1995

Department of Geography, East China Normal University, Shanghai, China, 200062

Thesis: *Surface water environment diagnosis system: Development and application in Pudong New Area, Shanghai, China*

Thesis Advisor: Guoyuan Wu

B.Sc., (with honor), July 1992

(**Minor:** International Finance and Trade)

Department of Geography, East China Normal University, Shanghai, China, 200062

Thesis: *A retrospective environmental impact assessment of Qinchun fertilizer company, Shanghai, China*

Thesis Advisor: Guoyuan Wu

RESEARCH INTERESTS

- GIS and Spatial Analysis on Economic, Environmental, and Public Health Issues
- Urban Sustainability and Policy
- The Geography of the Information Society

TEACHING INTERESTS

- Theories and Applications of GIScience
- Economic Geography/Urban and Regional Development
- Environmental Geography
- China/East Asia

TEACHING EXPERIENCE

Georgia Southern University

Geographic Information Science (GISci)

- [1] Introduction to GIS (GEOG 3430/5890G, discontinued in Fall 2006)
- [2] Introduction to GIS and Cartography (GEOG 3430//5890G)
- [3] Intermediate GIS (GEOG 4542/5890G)
- [4] Advanced GIS (GEOG 4543/5890G)
- [5] Cartography (GEOG 4541/5890G, discontinued in Fall 2006)
- [6] Applied GIS (GEOG 5091/5890G)
- [7] Programming in GIS-Python (GEOG 5890)

Regional Geography

- [8] World Regional Geography (GEOG 1130)
- [9] Geography of Asia (GEOG 4233)

Thematic Geography

- [10] Economic Geography (GEOG 3230)

Research Methods

- [11] Introduction to Research (GEOG/L 4120)
- [12] Senior Thesis Seminar (GEOG/L 4610)

Field-based Geography (University System of Georgia Summer Studying Abroad Courses)

- [13] World Regional Geography (GEOG 1130-S)
- [14] Geography of China (GEOG 4233-S)

Service

- [15] Internships in Geology/Geography (GEOL/GEOG 4790)

Texas A&M University

- Graduate Student Lecturer: Geography of the Global Village
- Teaching Assistant: Introduction to GIS; Thematic Cartography; Principles of GIS; Advanced GIS; Geography of the Global Village, Introduction to Human Geography.

East China Normal University

- Teaching Assistant: Introduction to GIS

PROFESSIONAL EXPERIENCE

Georgia Southern University

Associate Professor (tenured), Department of Geology and Geography, 08/01/2010 –
Assistant Professor (tenure-track), Department of Geology and Geography, 08/01/2004 –

Texas A&M University

Graduate Student Lecturer (Aggie Access Program), Department of Geography, 09/01/2003 - 05/14/2004, Department of Geography.

Research Assistant, 06/01/2002 - 08/31/2003, for Dr. D. Z. Sui, work on the environmental impacts of the digital economy project (jointly funded by USEPA and NSF). Responsible for collecting data, building economic-environmental model, and implementing input-output analysis.

Teaching Assistant, Department of Geography, 09/01/2001 - 05/31/2002, lab instructor for Geog475 (Advanced topics on GIS) and Geog390 (Principles of GIS).

Research Assistant, Department of Geography, 06/01/2001 - 08/31/2001, for Dr. D.Z. Sui, literature preparation for the projects of urban segregation and smart growth and webpage design/maintenance. Department of Geography, Texas A&M University.

Teaching Assistant, Department of Geography, 01/15/2001- 05/31/2001, lab instructor for GEOG 332 (Thematic Cartography). Department of Geography, Texas A&M University.

Teaching Assistant, Department of Geography, 09/01/2000 - 01/14/2001, Grader for GEOG 201 (Introduction to Human Geography). Departmental cartographer, help faculty members prepare maps and multimedia materials for their teachings and researches).

Z.J. Hi-Tech Park Development Co. Shanghai, China

Hi-Tech Project Coordinator, 11/01/1999 - 07/31/2000.

Planning Engineer, Department of Planning, 07/15/1995 - 10/31/1999.

East China Normal University

Research Assistant, Department of Geography, 09/01/1992 - 06/30/1995.

PEER-REVIEWED PUBLICATIONS

Journal Articles

- [1] Tian, J. and **W. Tu**, S. Tedders, and D. Chen. 2013. A spatial-temporal analysis of low birth weight in the State of Georgia, 1999-2009. *GeoJournal* (DOI 10.1007/s10708-013-9472-3).

- [2] Wang, Y., W. Ma, **W. Tu**, Q. Zhao, and Q. Yu. 2013. A study on carbon emissions in Shanghai 2000–2008, China. *Environmental Science & Policy* 27:151-161.
- [3] Tu, J., **W. Tu**, and S. Tedders. 2012. Spatial variations in the associations of birth weight with socioeconomic, environmental, and behavioral factors in Georgia, USA. *Applied Geography* 34 (2): 331-344.
- [4] **Tu, W.** 2012. Assessing Urban Environmental Management Practice with a Scalar Approach: The Case of Shanghai. *Symphony: Emerging Issues in Management* 2: 60-74.
- [5] **Tu, W.**, S. Tedders, and J. Tian. 2011. An Exploratory Spatial Data Analysis of Low Birth Weight Prevalence in Georgia. *Applied Geography* 32(2): 195-207.
- [6] **Tu, W.** and D. Z. Sui. 2011. A State Transformed by Information? Texas Regional Economy in the 1990s. *Regional Studies* 45(4): 525-543.
- [7] Lin, Y. F., **W. Tu**, H. Han, and W.C. Ma. 2008. Strategic Environmental Assessment for Shanghai Municipal Land Use Planning: A System Dynamics Approach *Asian Geographers* 25 (1&2): 145-171.
- [8] Francek, M., T. Grant, C. Schmidt, D. Tewksbury, **W. Tu**, and X. Zhang. 2006. Free or Inexpensive GIS Resources Available on the Web *Journal of Geoscience Education* 54(1):80-81.
- [9] **Tu, W.** and D. Z. Sui. 2006. The Transformation of Economic Structure and its Environmental Implications of a Digital City: An input-output analysis for Austin, Texas. *Canadian Journal of Regional Science* 28 (2): 49-79.
- [10] **Tu, W.** and C. Shi. 2006. Urban Environmental Management in Shanghai: Achievements, Problems, and Prospects *Environmental Management* 37(3):307-21.
- [11] **Tu, W.**, D. Sui, and J. Gavinha. 2004. Los cambios en la estructura económica en las colinas del silicio, 1990-1999 *Scripta Nova. Revista electrónica de geografía y ciencias sociales. Barcelona: Universidad de Barcelona*, 1 de agosto de 2004, vol. VIII, núm. 170 (22). <<http://www.ub.es/geocrit/sn/sn-170-22.htm>> (In Spanish).
- [12] Wu, G., **W. Tu**, D. Liu, and C. Shi. 1996. Heavy metal pollution in the substratum of the tidal beach near Bailonggang sewage outlet in Pudong, Shanghai: Investigation and assessment. *Journal of East China Normal University*, 52 - 56, special issue on the geographical researches in Pudong New Area, Shanghai (in Chinese).
- [13] Wu, G., C. Shi, **W. Tu**, and D. Liu. 1996. On the division of the functional regions for categorized environmental protection planning in Pudong, Shanghai. *Journal of East China Normal University*, 57 - 61, special issue on the geographical researches in Pudong New Area, Shanghai (in Chinese).
- [14] Wu, G., C. Shi, D. Liu, and **W. Tu**. 1996. Water quality analysis and assessment: The case of Chuanyang River, Pudong, Shanghai. *Journal of East China Normal University*, 45 - 51, special issue on the geographical researches in Pudong New Area, Shanghai (in Chinese).
- [15] **Tu, W.** and G. Wu. 1995. Surface water environment indicators system: Development and application on the industrial development zones. *Water Pollution and Control*, 1: 15 - 18 (in Chinese).

Book Chapters

- [1] **Tu, W.**, D. Z. Sui, and W.C. Ma. 2013. Urban Environmental Management in Shanghai: A multi-scale perspective In ***Sustainability: A Global Urban Context***, ed. I. Vojnovic, pp. 35-68, Michigan State University Press.
- [2] Sui, D. Z., **W. Tu**, and J. Gavinha. 2004. How smart is smart growth? The case of Austin, Texas, In ***WorldMinds: Geographic perspectives on 100 problems***, eds. D. G. Janelle, B. Warf, and K. Hansen. Dordrecht, p. 209-14. The Netherlands: Kluwer Academic Publishers.

Conference Proceedings

- [1] **Tu, W.** 2007. Substitution of Information for Energy: An Empirical Investigation using Input-Output Analysis for the U.S. Regional Economy. In ***Proceedings of the 2007 IEEE International Symposium on Electronics and the Environment (ISEE)***, p.164-69, IEEE Computer Society, Technical Committee on Electronics and the Environment.
- [2] **Tu, W.**, L. Li, and R. Piltner. 2005. A Study of Smart Growth Initiatives using GIS: The case of Austin, Texas. ***Proceedings of 2005 National Conference on Digital Government Research***, p.267-8, Digital Government Research Center, University of Southern California.
- [3] **Tu, W.** and D. Z. Sui. 2005. Information and Energy Substitution in the Digital Economy: An Empirical Investigation using the Input-output Approach for Texas. In ***Proceedings of the 2005 IEEE International Symposium on Electronics and the Environment (ISEE)***, p.189-193, IEEE Computer Society, Technical Committee on Electronics and the Environment.

Book Reviews

- [1] **Tu, W.** 2008. *Quantitative Methods and Applications in GIS* by Fahui Wang. ***The Professional Geographer*** 60 (3): 434-35.

NON-REFEREED PUBLICATOINS

- [1] **Tu, W.** 2006. Information and Energy/Material Substitution in the Digital Economy: Evidences from the U.S. Regional Economy in the 1990s. ***The 2006 National IMPLAN Users Conference Proceedings*** (12 pages), Indianapolis, IN, June 6-8, 2006.
- [2] **Tu, W.** and D. Z. Sui. 2004. The changing economic structure of Texas in the 1990s: A GIS-Based modeling and analysis approach. ***The 2004 National IMPLAN Users Conference Proceedings*** (37 pages), October 6-8, 2004, Shepherdstown WV.
- [3] **Tu, W.** and D. Z. Sui. 2004. Environmental impacts of the digital economy: Implications for the environmental policy in the information age. ***Proceedings of International conference on urban dimensions of environmental change: Science, exposures, policies, and technologies*** (17 pages).

PUBLICATIONS: UNDER REVIEW

- [1] **Tu, W.** and L. Zhu. Basic Concepts in Spatial Epidemiology, in *Applications of Geographic Analysis on Public Health Problems*, eds. Shi, X. and F. Wang. Beijing: Higher Education Publishing House.

- [2] **Tu, W.**, J. Tu and S. Tedders. Investigating Risk Factors of Preterm Births Using Multilevel Logistic Regression Models - A Case Study in Georgia, USA (*The Professional Geographer*).

PUBLICATIONS: IN PREPARTION

- [1] Markley, S. and **W. Tu**. Regional and Racial Disparity of Preterm Birth Prevalence in Georgia, 1995-2010 (To be submitted to *Internal Journal of Applied Geospatial Technologies*).
- [2] Hines RB., Barrett A., Twumasi-Ankrah P., **Tu W.**, Broccoli D., Ablah EA., Jacobson LT., Redmond M., and Collins TC. Predictors of Guideline-Concordant Treatment and Survival in Patients with Colorectal Cancer.

PAPER PRESENTED IN PROFESSIONAL MEETINGS AND ABSTRACTS PUBLISHED

- [1] **Tu, W.** and L. Mu 2014. Census Tracts vs. MSSC-generated Geographic Areas- A Comparison Study of Preterm Birth in Georgia, USA Using Multilevel Models. **2014 AAG Annual Meeting**, Tampa, FL, April 8 - 12, 2014 (forthcoming).
- [2] Tu, J. and **Tu, W.** 2014. Examining Spatially Varying Relationships between Preterm Births and Socioeconomic, Environmental, and Behavioral Factors using Geographically Weighted Logistic Regression. 2014 AAG Annual Meeting, Los Angeles, CA, April 8 - 12, 2014 (forthcoming).
- [3] **Tu, W.** 2013. Investigating Risk Factors of Preterm Births Using Multilevel Logistic Regression Models - A Case Study in Georgia. **The 21st International Conference on Geoinformatics**, Kaifeng, China, June 20-22, 2013.
- [4] **Tu, W.** 2013. Investigate risk factors of preterm births in Georgia using multilevel regression models. **2013 AAG Annual Meeting**, Los Angeles, CA, April 9 - 13, 2013.
- [5] **Tu, W.** and S. MacDonald. 2012. Proximity to Waste Sites and Low Birth Weight in Georgia. **2012 ESRI International User Conference**, San Diego, CA, July 23-27, 2012.
- [6] Mu, L., P. Yin, and **W. Tu**. 2012. All Roads Lead to Rome? Building a Method Framework of Spatial Clustering for Geographic Health Disparities. **The 20th International Conference on Geoinformatics**, Hong Kong, China, June 15-17, 2012.
- [7] Tian, J. and **W. Tu**. 2012. A Spatial-Temporal Analysis of Low Birth Weight in the State of Georgia (1994-2009)? **2012 AAG Annual Meeting**, New York, NY, February 23 - 28, 2012.
- [8] **Tu, W.** and J. Tian. 2012. Growth in U.S. States, 1977-2001: How Much Do Foreign Direct Investment, Recessions, Human Capital, and Physical Capital Matter? **2012 AAG Annual Meeting**, New York, NY, February 23 - 28, 2012.
- [9] **Tu, W.** and D. Z. Sui. 2011. Assessing Urban Environmental Management Practice with a Scalar Approach: The Case of Shanghai. **Beijing Forum 2011**, Beijing, China Nov. 4-6, 2011.
- [10] Tu, J. and **W. Tu**. 2011 Spatial Variations in the Relationships between Birth Weight and Socioeconomic, Environmental, and Behavioral Factors in the State of Georgia, USA, Explored by Geographically Weighted Regression. **The 19th International Conference on Geoinformatics**, Shanghai, China, June 24-26, 2011.
- [11] **Tu, W.** 2011. Modeling Low Birth Weight Incidence in the State of Georgia using spatial regression. **2011 AAG Annual Meeting**, Seattle, WA, April 12 - 16, 2011.

- [12] **Tu, W.** 2010. Low Birth Weight Incidence in the State of Georgia, 2000. **2010 AAG Annual Meeting**, Washington, DC, April 14 - 18, 2010.
- [13] **Tu, W.** 2009. A State Transformed by Information: Texas Regional Economy in the 1990s. **2009 AAG Annual Meeting**, Las Vegas, NV, March 23 - 27, 2009.
- [14] **Tu, W.**, K. S. McElveen, S. Tedders. Mapping low birth weight incidences in Georgia public health districts 9. **2008 SEDAAG Annual Meeting**, Greensboro, NC, November 23 - 25, 2008 (poster session).
- [15] **Tu, W.** 2008. From Industrial Ecology to Information Ecology: A Structural Economics Approach. **2008 AAG Annual Meeting**, Boston, MA, April 15 - 19, 2008.
- [16] **Tu, W.** and W. C. Ma. 2007. Integrating System Dynamics Modeling into Plan Level Strategic Environmental Assessment: The case of Shanghai. **2007 AAG Annual Meeting**, San Francisco, CA, April 17 - 21, 2007.
- [17] **Tu, W.** 2007. Substitution of Information for Energy: An Empirical Investigation using Input-Output Analysis for the U.S. Regional Economy. **2007 IEEE International Symposium on Electronics and the Environment (ISEE)**. Orlando, FL, May 7 - 10, 2007.
- [18] **Tu, W.** 2006. Information and Energy/Material Substitution in the Digital Economy: Evidences from the U.S. Regional Economy in the 1990s. **The 2006 National IMPLAN Users Conference**, Indianapolis, IN, June 6-8, 2006.
- [19] Zhang, X. and **W. Tu.** 2006. Spatial and Temporal Clusters of Narcotics Activities and Their Relationship to Social and Built Environments: A Case Study of Chicago. **2006 AAG Annual Meeting**, Chicago, March 7 - 11, 2006.
- [20] **Tu, W.** 2006. The Transformation of Economic Structure and its Environmental Implications of a Digital City: An input-output analysis for Austin, Texas. **2006 AAG Annual Meeting**, Chicago, March 7 - 11, 2006.
- [21] **Tu, W.** and D. Z. Sui. 2005. Information and Energy Substitution in the Digital Economy: An Empirical Investigation using the Input-output Approach for Texas. **2005 IEEE International Symposium on Electronics and the Environment (ISEE)**. New Orleans, LA, May 16-19, 2005.
- [22] **Tu, W.** and W. C. Ma. 2005. The Environmental Dimension of the Industrial and Science Parks of China: The Case of Zhangjiang Hi-Tech Parks, Shanghai. **2005 AAG Annual Meeting**, Denver, CO, April 4 - 9, 2005.
- [23] **Tu, W.** and D. Z. Sui. 2004. It from bit? Perspectives on the new generation of environmental policies in the digital economy and information age. **2004 AAG Annual Meeting**, Philadelphia, PA, March 14 - 19, 2004.
- [24] **Tu, W.** and D. Z. Sui. 2003. The changing economic structure of the Silicon Hill: 1990-1999. **2003 SWAAG Annual Meeting**, Stillwater, OK, October 23 - 25, 2003.
- [25] **Tu, W.** 2003. A new environmental management approach toward the sustainable development for the city of Shanghai, China. **2003 AAG Annual Meetings**, New Orleans, LA, March 5 - 8, 2003.
- [26] **Tu, W.** and D. Z. Sui. 2002. Environment impacts on digital economy: Towards a new conceptual framework. **2002 AAG Annual Meeting**, Los Angeles, CA, March 19 - 22, 2002.
- [27] **Tu, W.** 2000. Development and application of surface water quality diagnosis system: The case of Pudong, Shanghai. **2000 SWAAG Annual Meeting**, College Station, TX, November 5-7, 2000.

PENDING RESEARCH PROPOSALS

- [1] **\$232,296**, Rapid urbanization and sustainability: balancing development, ecosystem services and human well being in Shanghai China (role: senior research personnel. National Science Foundation, July 1, 2014 - June 30, 2016, PI: Vojnovic, I., submitted on November 19, 2013)

FUNDED RESEARCH PROPOSALS

External

- [1] **\$317,866**, "Connectivity between the Altamaha River estuary and critical coastal marine habitats" Funded by **Coastal Incentive Grant (CIG) Program, Georgia Department of Natural Resources** (Co-PI, with Daniel Gleason and Risa Cohen, October 2013-August 2015).
- [2] **\$766,391**, "Assessment of Hydrological, Biological and Environmental Components of the Lower Ogeechee River Ecosystem," Funded by **Environmental Protection Division, Georgia, Department of Natural Resources**, (#EPD-WQ-5419, 2013-2015, senior research personnel, September 2013-December 2016).
- [3] **\$25,000**, "Integrating Structural Economics Approaches and Geographic Information Systems to Study Substitution Information for Energy: Towards an Industrial Ecology to the information Ecology," Funded by **AT&T Industrial Ecology Fellowship Program** (January 31, 2007, PI).

Internal

- [1] **\$9,688**, "Modeling the Spatial-Temporal Variability of Air Quality and Its Effects on Public Health in Georgia," with Jie Tian (Department of Geology and Geography, Georgia Southern University), Funded by **The Faculty Research Committee, Georgia Southern University** (May 2011, co-PI).
- [2] **\$9,949**, "Detecting spatial clusters of low birth weight in southeast Georgia," with Stuart Tedders (Jiann-Ping Hsu College of Public Health, Georgia Southern University), Funded by **The Faculty Research Committee, Georgia Southern University** (March 2008, co-PI).
- [3] **\$9,163**, "Integrated GIS and Spatial Econometric Approaches to Study the Spatial Differentiation and Environmental Consequences of the Emerging Digital Economy in the United States during the 1990s," funded by **The Faculty Research Committee, Georgia Southern University** (March 8, 2005, PI).

FUNDED TEACHING PROPOSALS

External

- [1] **\$45,000**, "Developing a short course in coastal vulnerability to enhance students' geoscientific thinking skills" Funded by the **InTeGrate Program, US National Science Foundation** (with Drs. Jean Ellis and Lei Wang, May 2013-May 2015).

Internal

- [1] **\$3,000**, "Integrating Video-based Case Studies into World Regional Geography Classes," funded by **Center for Excellence in Teaching, Georgia Southern University** (Applied with Drs. Robert Yarbrough and Mark Welford, May 4, 2010, co-PI).

- [2] **\$810**, SPACE Instructional Development Award, funded by **Center for Spatially Integrated Social Science**, University of California at Santa Barbara (January 22, 2007, PI).
- [3] **\$6,840**, “Enhancing Skills of Geospatial Technologies of K-12 Teachers in Southeast Georgia,” funded by **The Georgia Partnership for Reform in Science and Mathematics (PRISM)** program. (April 7, 2006, PI).
- [4] **\$3,000**, “Redesign Selected Topics in GIS Course,” funded by **Center for Excellence in Teaching, Georgia Southern University** (March 3, 2005, PI).

FUNDED SERVICE PROPOSALS

- [1] **\$7,727**, “Setting up a Geosciences Information Center.” Funded by **Student Technology Fee Program, Georgia Southern University** (Applied with Dr. Charles Trupe, April 4, 2005, co-PI).

SUBMITTED TEACHING/RESEARCH PROPOSALS

External

- [1] **\$400,000**, REU Site: Research opportunities in sustainability - From Community to Bench and Back (National Science Foundation, 01/01/2013-12/31/2017, PI: Leege, L.), faculty mentor, declined)
- [2] **\$306,729**, “Connectivity between Georgia rivers and critical coastal marine habitats” Submitted to **Coastal Incentive Grant (CIG) Program, Georgia Department of Natural Resources**. (Submitted in January 16, 2012, CoPI, with Daniel Gleason and Risa Cohen, declined).
- [3] **\$25,000**, “Study Substitutability between Production Factors Using Integrated Spatial Econometric and Input-output Models and Geographic Information Systems.” **The AT&T Technology and Environment Awards Program** (Submitted in December 31, 2009, PI, declined).
- [4] **\$25,000**, Study Substitutability between Production Factors Using Integrated Spatial Econometric and Input-output Models and Geographic Information Systems. **The AT&T Foundation** (Submitted in December 2009, PI, declined).
- [5] **\$998,406**, Improving Cancer Screening Among Underserved Rural Women. **NIH Challenge Grants Program**, Topic 09-MD-101: (Submitted in May 2009, Co-PI, declined).

Internal

- [1] **\$3,000**, Integrating Video-based Case Studies into World Regional Geography Classes **Center for Excellence in Teaching, Georgia Southern University** (February 2008, declined)
- [2] **\$3,000**, Introducing Distributed GIS into the GIS Curriculum at Georgia Southern University. **Center for Excellence in Teaching, Georgia Southern University** (February 2007, declined).
- [3] **\$9,962**, The Distributional Impacts of Georgia’s HOPE Scholarships: Exploring Spatial Interdependencies using GIS-based Geographically Weighted Regression Models. **The Faculty Research Committee, Georgia Southern University** (January 2007, declined).
- [4] **\$1,000**, Assessing Environmental Impacts of the Digital Economy in the United States: An Integrated GIS and Economic Modeling Approach. **AAG Research Grant** (December 2005, declined).

GRANT REPORTS

- [1] Tian, J. and **W. Tu**. Modeling the Spatial-Temporal Variability of Air Quality and Its Effects on Public Health in Georgia. Project Report Submitted to **Office of Research Services and Sponsored Programs, Georgia Southern University** (2 pages). August 15, 2012.
- [2] **Tu. W.** Integrating Structural Economics Approaches and Geographic Information Systems to Study Substitution Information for Energy: Towards an Industrial Ecology to the information Ecology. A Summary Project Report Submitted to **AT&T Foundation** (4 pages). August 29, 2009.
- [3] Tedders, S. and **W. Tu**. Detecting Spatial Clusters of Low Birth Weight in Southeast Georgia. A Summary Project Report Submitted to **Office of Research Services and Sponsored Programs, Georgia Southern University** (5 pages). August 14, 2009.
- [4] **Tu. W.** Develop an Integrated GIS and Spatial Econometric Approaches to Study the Spatial Differentiation and Environmental Consequences of the Emerging Digital Economy in the United States. A Summary Project Report Submitted to **Office of Research Services and Sponsored Programs, Georgia Southern University** (3 pages). November 21, 2006.
- [5] **Tu. W.** Enhancing Skills of Geospatial Technologies in K-12 Teachers in Bulloch County, Georgia. A Summary Project Report Submitted to **the East Central Georgia Region Partnership for Reform in Science and Mathematics (PRISM)**. November 21, 2006.

OTHER FUNDING

- [1] \$1,000, Travel Grant, Jackson School of Geosciences, The University of Texas at Austin, November 2013.
- [2] \$342, Travel Grant, Awarded by InTeGrate, a National Science Foundation (NSF) STEP Center grant (2012-16), March 2012.
- [3] \$1,727, Faculty Travel Grant, Awarded by Faculty Development Committee, Georgia Southern University, February 2012.
- [4] \$1,300, Travel Grant, Awarded by Beijing University, September 2011.
- [5] \$1,580, Faculty Travel Grant, Awarded by Faculty Development Committee, Georgia Southern University, February 2010.
- [6] \$1,250, Workshop on Advanced Spatial Analysis, funded by the Center for Spatially Integrated Social Science, University of California at Santa Barbara, and Georgia Southern University, April, 2009.
- [7] \$1,005, Faculty Travel Grant, Awarded by Faculty Development Committee, Georgia Southern University, February 2008.
- [8] \$950, SPACE Workshop: GIS and Spatial Modeling for the Undergraduate Social Science Curriculum, , funded by the Center for Spatially Integrated Social Science, University of California at Santa Barbara, May, 2007.
- [9] \$500, Academic Excellence Fund, Awarded by College of Science and Technology, Georgia Southern University, February 28, 2007.
- [10] \$1,000, SPACE Workshop: Spatial Analysis in the Social Science Curriculum, funded by Center for Spatially Integrated Social Science, University of California at Santa Barbara, April, 2006.

- [11] \$425, Summer Workshop for Early Career Geography Faculty, funded by Geography Faculty Development Alliance, University of Colorado at Boulder, November, 2005.
- [12] \$980, Faculty Travel Grant, Awarded by Faculty Development Committee, Georgia Southern University, February 2005.
- [13] \$250, Cutting Edge Workshop Travel Grant, Awarded by NAGT/DLESE, June 2004.
- [14] \$168, FPC Travel Grant, Awarded by National Committee on U.S. - China Relations, June 2004.
- [15] \$650, AAG Conference Travel Grant, Awarded by Department of Geography, Texas A&M University, March, 2004.
- [16] \$650, AAG Conference Travel Grant, Awarded by Department of Geography, Texas A&M University, March, 2003.
- [17] \$600, AAG Conference Travel Grant, Awarded by Department of Geography, Texas A&M University, March, 2002.

HORNORS AND AWARDS

- [1] Faculty Sustainability Fellow (2012-13), \$1,000. Awarded by Center for Sustainability (Cfs), Georgia Southern University, September 29, 2011.
- [2] Invited Speaker in 2011 Beijing Forum. Invited by Qifeng Zhou, President, Beijing University, September 13, 2011.
- [3] AT&T Fellow in Industrial Ecology, \$25,000. Awarded by AT&T via national competition, January 21, 2007.
- [4] The Regent Graduate Fellow, \$9,000. Awarded by Office of Graduate Studies, Texas A&M University, September, 2003.
- [5] Second Place, Student Paper Competition. Awarded by China Specialty Group, Association of American Geographers (AAG), March, 2003.
- [6] The Pipe Fellowship, Finalist at College of Geosciences, August, 2003.
- [7] GERAC Fellowship, \$1,000. Awarded by Deans Office, College of Geosciences, Texas A&M University, June, 2002.
- [8] Excellent Graduate of Master Student. Awarded by East China Normal University, P.R. China, July, 1995.
- [9] Graduate Excellence Scholarship. Awarded by Office of Graduate Studies, East China Normal University, P.R. China, July, 1993.
- [10] Excellent Graduate of Colleges and Universities in Shanghai. Awarded by Municipal Government of Shanghai, P.R. China, 1992.
- [11] Enthusiast of Student Worker. Awarded by East China Normal University, P.R. China, 1989 - 1990 academic year.
- [12] Recipient of University Scholarship for Academic Excellence in four consecutive years, 1988 - 1992. Awarded by East China Normal University, P.R. China.

COMMITTEE WORK & PROFESSIONAL SERVICES

Committee Roles at Georgia Southern

- Member, Assessment Committee, Department of Geology and Geography, Spring 2009 -

- Member, Bachelor of Science Program Review Committee, Department of Geology and Geography, Fall 2008 - Spring 2009.
- Member, Bachelor of Arts Program Review Committee, Department of Geology and Geography, Fall 2007 - Spring 2008.
- Chair, Departmental Curriculum Committee, Department of Geology and Geography, (Fall 2010-Summer 2013).
- Member, Departmental Curriculum Committee, Department of Geology and Geography, Fall 2005-.
- Member, Faculty Search Committee, Department of Geology and Geography, 2004-(Chair, 2012-2013 and 2013-2014).
- Member, Hanson-Good Scholarship Committee, Department of Geology and Geography, Spring 2007-.
- Member, Faculty Peer Teaching Evaluation Committee, Georgia Southern University, Department of Geology and Geography, Fall 2005 -.
- Member, Award of Excellence in Research Committee, College of Science and Technology, Spring 2007 - Spring 2009 (Chair, 2008).
- Member, Award of Excellence in Service Committee, College of Science and Technology, Spring 2006 - Spring 2007.
- Member, Award Committees (in teaching, research, and service), College of Science and Technology, Fall 2009 - Spring 2010.
- Member, Curriculum Committee, College of Science and Technology, Fall 2010 -.
- Member, Research Computing Advisory Council (RCAC), Georgia Southern University, Fall 2013-.

Other Service Roles at Georgia Southern

- Search Committee, College of Business Administration, Spring 2011
- Annual Savannah GIS Day coordinator, Fall 2009 -.
- Departmental seminar co-coordinator, Fall 2009 -.
- Campus coordinator, ESRI Development Center, Spring 2009 -.
- Campus representative, the USG Summer Studying Abroad Program (China), Fall 2007-.
- Departmental Student Internship Program Coordinator, Fall 2005-.
- GIS advisor for Coastal Rivers Water Planning and Policy Center, College of Business Administration, Georgia Southern University, Fall 2007- Fall 2008.
- GIS Lab Coordinator, Fall, 2004-.
- Undergraduate Advisor, Fall, 2005 -.
- Faculty Meeting Minute Recorder, Fall 2004 – Spring 2005.

Book Reviewer for Commercial Publishers

- *CRC Press*
- *Pearson/Prentice Hall*
- *McGraw Hill*

Manuscript Reviewer for Refereed Journals

- *Reviewing Board, International Journal of Applied Geospatial Research (IJAGR), 2013-*
- *Applied Geography*
- *Canadian Journal of Regional Science*
- *Environmental Management*
- *Environment and Planning B: Planning and Design*
- *Environmental Science and Policy*
- *GeoJournal*
- *International Journal of Health Geographics*
- *International Journal of Computers, Environment, and Urban Systems*
- *The Professional Geographer*

Other Service Roles

Judge, the best student paper award, IEEE International Symposium on Electronics and the Environment (ISEE), April 2006.

Technical Report (written) Interpreter, The World Bank Shanghai Environmental Project, Shanghai Environmental Protection Bureau and East China Normal University, February, 1993- May, 1994.

President, Association of Geography Major Graduate Students, East China Normal University, 1992-1993.

Editorial Board, *Sun Wind*, A student journal published at East China Normal University, 1991.

Faculty Representative, Association of geography major graduate students, Texas A&M University, 09/01/2003 - 05/14/2004.

THESES/STUDENT RESEARCH SUPERVISION

Theses

- [1] Chen, Yijie. 2013. Seasonality of Low Birth Weight Prevalence and Effect of Heat Stress on Birth Outcomes in Georgia, U.S. (Advisory Committee Member, MS Geography, University of Georgia)
- [2] McElveen, Kirk. 2009. The Spatial Pattern of Low Birth Weight (LBW) in Southeastern Georgia (Major advisor, BS Geography, College Office of Undergraduate Research (COUR) Grant recipient).
- [3] Chan, Cynthia. Spring - Fall 2007. The Influence of urban noise on fish crow vocalizations in the southeastern United States. (Advisory Committee Member, MS Biology)

Research Projects

- [1] Derr, Samuel. Fall 2013 - Estimating the areal coverage of security camera at Georgia Southern University Campus using Python Programming.
- [2] Cameron, Thompson Fall 2013 - Building an Italian Lightning Database using Python Programming.
- [3] Markley, Scott. Fall 2013- Regional and Racial Disparity of Preterm Birth Prevalence in Georgia, 1995-2010.

- [4] Garner, Robert. Spring 2013-. Visualizing creative class in Savannah, Georgia.
- [5] Arjnoa, Nicholas. 2012-13. A locational analysis of the US Soccer Youth System using Geographic Information System (BA Geography student).
- [6] Reams, Katie. 2012-13. Using Geographic Information System for Wetland Analysis. (MS Biology student)
- [7] McCray, Andrew and Crane, Adrian. 2012-13. Developing an internet-based map using ArcGIS online.com platform for Georgia museums and Galleries. (Requested by Georgia Association of Museums and Galleries (GAMG)).
- [8] MacDonald, Stephen. 2012-13. Association between Superfund sites and Low Birth Weight (LBW) Prevalence in Georgia (BA Geography student, 2012-13 College Office of Undergraduate Research (COUR) Recipient).

INVITED PRESENTATIONS

- [1] Investigating Risk Factors of Preterm Births Using Multilevel Logistic Regression Models - A Case Study in Georgia, USA, First Sino-US Workshop on GIS applications on Public Health Research, Beijing Normal University, Beijing, June 27-29, 2013.
- [2] Investigating Risk Factors of Preterm Births Using Multilevel Logistic Regression Models - A Case Study in Georgia, USA, Beijing Normal University (Zhuhai campus, Zhuhai, China), Jiangxi Normal University (Nanchang, China), June 14 and June 17, 2013.
- [3] Analyzing Low Birthweight Births Using ESDA and Multilevel Regression Models. Department of Geography Colloquium, University of Georgia, Athens, GA, September 7, 2012.
- [4] Geospatial Technologies in Teaching, Researching & Practicing Sustainability, Center for Sustainability, Georgia Southern University, March 30, 2012.
- [5] Modeling Low Weight Birth (LWB) Prevalence in Georgia. Invited by Professor Chunyang He, State Key Laboratory of Earth Surface Processes and Resource Ecology, Beijing Normal University, Beijing, China, October 30, 2011.
- [6] The Application of R language in Environmental Studies: An Introduction, Invited by Dr. Weiqin Lin, Shanghai Academy of Environmental Sciences (SAES), July 4, 2011.
- [7] Low Birth Weight Prevalence in Georgia, 2000. 2009 Seminar Series, Department of Geology and Geography, Georgia Southern University, Statesboro, GA, September 17, 2009.
- [8] Detecting the Spatial Pattern of Low Weight Birth (LWB) in Southeastern Georgia. Young Scholar Summer Workshop, The International Association of the Chinese Professionals in Geographic Information Science (CPGIS). East China Normal University. Shanghai, China, June 18-20, 2008.
- [9] Detecting the Spatial Pattern of Low Weight Birth (LWB) in Southeastern Georgia. Invited by Professor Jing Luo, Executive Associate Dean, School of City and Environmental Science, Hua Zhong Normal University, Wuhan, China, June 12, 2008.
- [10] GIS Applications in Public Health: An Overview. A presentation given to Professor Thomas Kollars' Environmental Health class, Jiann-Ping Hsu College of Public Health, Georgia Southern University, Statesboro April 3, 2008.
- [11] Environmental Management and Policy of the Digital Economy: Issues and Perspectives, a presentation given to Shanghai Academy of Environmental Sciences (SAES), July 8, 2005.

- [12] Geographic Information Sciences: Current Applications and Development Future Trends, a presentation given to Professor Li's Advanced Database Management (CPCS 330) class, Department of Computer Sciences, Georgia Southern University, Statesboro, Georgia, April 19, 2005.
- [13] Sustainability: Meaning, measurement, and policy implications (II), a presentation given to Professor Sui's Natural Resources and Environment (GEOG 330) class, Department of Geography, Texas A&M University, College Station, Texas, April 16, 2003.
- [14] Sustainability: Meaning, measurement, and policy implications (I), a presentation given to Professor Sui's Natural Resources and Environment (GEOG 330) class, Department of Geography, Texas A&M University, College Station, Texas, April 14, 2003.
- [15] Toward sustainable urban environmental management: The case of Shanghai, China, a presentation given to Professor Sui's Natural Resources and Environment (GEOG 330) class, Department of Geography, Texas A&M University, College Station, Texas, February 28, 2003.
- [16] An introduction to China's environmental and human geography, a presentation given to Dr. Acheson's Geography of Global Village (GEOG 202) class, Department of Geography, Texas A&M University, College Station, Texas, November 06, 2002.

CONSULTING WORK

- [1] Mapping Supervisor, the Metro Atlanta Equity Atlas (MAEA), Partnership for Southern Equity (PSE), Atlanta, GA, June-August 2012.
- [2] Mapping/GIS Expert, Simulating Water Quantity and Quality in Southeast Georgia: A combined SWAT and BASINS Modeling Approach. Georgia Coastal Rivers Water Planning and Policy Center, May- August, 2008.
- [3] Mapping/GIS Expert, Investigating Agriculture Water Consumption in Southeast Georgia using mobile GIS, Georgia Coastal Rivers Water Planning and Policy Center, September 2007- November, 2008.

PROFESSIONAL AFFILIATIONS

Council of Undergraduate Research (CUR), since 2013

- *Association of American Geographers (AAG)* (in GIS, Economic Geography, and China Specialty Groups), since 2001.
- *The International Association of the Chinese Professionals in Geographic Information Science (CPGIS)*, since 2004 (lifetime member and member in Health GIS specialty group).

LANGUAGE SKILLS

- Chinese (Native Language).
- English (Working Language).
- Spanish (Work in progress).

COMPUTER SKILLS

GIS

- Arc/Info (and AML)/ ArcView (and Avenue)
- ArcGIS (and Python)
- ArcPad
- ArcServer/Arc Image Server (in progress)
- ArcGIS API for Flex (in progress)
- Google Earth (and KML)

IMAGE PROCESSING/GPS

- ERDAS Imagine
- ERMapper
- Trimble Pathfinder

(SPATIAL) STATISTICAL SOFTWARE

- R/SPSSGeoDa

COMPUTER LANGUAGE

- Visual Basic/Fortran/C/JAVA

OTHER PROFESSIONAL SOFTWARE PACKAGES

- IMPLAN (Developed by MIG for Input-Output Analysis)
- BASINS (Developed by USEPA, Watershed Modeling and Management)
- SWAT (Developed by USDA, Soil and Water Assessment)
- WASP (Developed by USEPA, Water Quality Analysis and Simulation)

PROFESSIONAL DEVELOPMENT

Comprehensive

- [1] **Summer Workshops for Early Career Geography Faculty**, Organized by Geography Faculty Development Alliance (Funded by National Science Foundation). University of Colorado at Boulder, Boulder, CO, June 17-24, 2006.
- [2] **On the Cutting Edge Early Career Faculty Workshop: Teaching, Research and Managing Your Career**, Organized by NAGT/DLESE, College of William and Mary, Williamsburg, VA., June 12-17, 2004.

Teaching

- [3] **Summit on the Future of Geoscience Undergraduate Education**, January 10-12, 2014. The University of Texas, Austin, Austin, TX
- [4] **InTeGrate Module Authors Meetings**, May 19-24, 2013. Carleton College, Northfield, MN
- [5] **Integrating Assessment: Making the Process Work for You**. May 14-16, 2013. Georgia Southern University.

- [6] **Introduction to Geoprocessing Scripts Using Python (v. 10)**. An online class, ESRI Training Services. May 14-16, 2012.
- [7] **Programs that Bring Together Geoscience and Sustainability**. Stanford University, Palo Alto, CA. May 23-25, 2012.
- [8] **Team-based Learning, Center for Excellence in Teaching**, Georgia Southern University, Statesboro, GA. January 5, 2011.
- [9] **Process Oriented Guided Inquiry Learning (POGIL) workshop**, Center for Excellence in Teaching, Georgia Southern University, Statesboro, GA. July 6-29, 2010.
- [10] **Course Design Series Workshop, Center for Excellence in Teaching**, Georgia Southern University, Statesboro, GA. May 11-13, 2009.
- [11] **GIS in Teaching and Research Symposium**, Georgia Institute of Technology, Atlanta, GA, February 14-15, 2008.
- [12] **Introduction to ArcGIS Server**. ESRI Educational Services, Atlanta, GA. August, 2007.
- [13] **SPACE Workshop: GIS and Spatial Modeling for the Undergraduate Social Science Curriculum**, The Ohio State University, Columbus, OH, June 18 – 23. 2007.
- [14] **Spatial Analysis in the Social Science Curriculum: Enhancing Undergraduate Learning**, Organized by Center for Spatially Integrated Social Science, University of California at Santa Barbara, Santa Barbara, CA, July 31-August 5, 2006.
- [15] **Teaching the Middle East Workshop**, Organized by the Global Partnerships Program of the University System of Georgia, Emory University, Atlanta, GA, November 4-6, 2005.
- [16] **Designing Effective and Innovative Courses in Geosciences**, Organized by NAGT/DLESE, Georgia Southern University, Statesboro, GA., June 1-5, 2005.
- [17] **U.S. Foreign Policy Colloquium**, Organized by National Committee on United States - China Relations and Elliott School of International Affairs, The George Washington University, Washington, D.C., June 2-5, 2004.
- [18] **Large Class Teaching Symposium**, Organized by the Center for Teaching Excellence, Texas A&M University. College Station, TX, January 30, 2004.

Research

- [19] **GIS Applications in Public Health Research**, organized by CPGIS, Beijing Normal University, Beijing, China, June 27-29, 2013.
- [20] **Implementing & Expanding Undergraduate Research**, given by Council on Undergraduate Research (CUR) Institute, Statesboro, GA, January 29-30, 2013.
- [21] **Granting Writing Workshop**, given by Dr. Stephen Russell and organized by Office of Research Services and Sponsored Programs, Georgia Southern University, Statesboro, GA, October 10, 2010.
- [22] **Qualitative Interview Research: Design, Collection and Analysis**, given by Dr. Kathleen deMarrais at University of Georgia, Georgia Southern University, Statesboro, GA, August 9, 2010.
- [23] **Workshop on Advanced Spatial Analysis**, the Center for Spatially Integrated Social Science, University of California at Santa Barbara, July 12-18, 2009.
- [24] **Grant Writing Workshop in Public Health Workshop**, Jiann-Ping Hsu College of Public Health, Georgia Southern University, Statesboro, GA, February 27, 2008.

- [25] **The Second ICA Workshop on Geospatial Analysis and Modeling: Spatial Structure and Dynamics of Urban Environments**, University of Georgia, Athens, GA, July 12-13, 2007.
- [26] **IMPLAN Workshop**, Organized by Minnesota IMPLAN Group, Stillwater, MN, May 11-12, 2006.
- [27] **Write Winning Grants Workshop**, Chaired by Dr. Stephen W. Russell, Texas A&M University, College Station, TX, September 24 - 25, 2003.
- [28] **Workshop on Major U.S. EPA Developed Water Environment Modeling Tools**, Chaired by Dr. Yichun Xie, Shanghai Academy of Environmental Sciences, November 9-11, 1999.

Service

- [29] **Workshop on Assessment Practices in the College Science Classroom**, Partially supported by the National Science Foundation's Course, Curriculum, and Laboratory Improvement (CCLI) program under Award no. 0941976, Georgia Southern University, Statesboro, GA, June 1-2, 2012
- [30] **Student Learning Oriented Assessment for Curriculum Development & Teaching Enhancement Workshop**, by Dr. Larry Kelley, Abraham Baldwin Agricultural College, Tifton, GA, April 17, 2009.

