

## CURRICULUM VITAE

### FANG QIU

Program in Geospatial Information Sciences  
School of Economic, Political and Policy Sciences  
University of Texas at Dallas  
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Phone: 972-883-4134; Fax: 972-883-6297  
Email: [ffqiu@utdallas.edu](mailto:ffqiu@utdallas.edu)  
Homepage: <http://www.utdallas.edu/~ffqiu>

#### EDUCATIONAL HISTORY

- Ph. D. December 2000, University of South Carolina, Columbia, South Carolina,  
Geographic Information System and Remote Sensing  
Dissertation: *Opening the Black Box of Neural Networks and Breaking the  
Knowledge Acquisition Bottleneck of Fuzzy Expert Systems with a Hybrid  
Neuro-Fuzzy Image Classification System*, Major Advisor: John R. Jensen.
- M. Sc. August 1993, National Laboratory of Resource and Environmental  
Information System, Chinese Academy of Sciences, Beijing, China,  
Geographic Information Systems  
Thesis: *Spatial Decision Support System for Site Selection Study*.
- B. Sc. August 1990, East China Normal University, Shanghai, China  
Geography with GIS emphasis  
Thesis: *Map Display System Design and Implementation for GIS*.
- Certificates August, 1995, Authorized Instructor, Environment System Research  
Institution (ESRI). For teaching *Introduction to Arc/Info, Introduction to  
ArcView GIS, and Spatial Database Design*

#### PROFESSIONAL TRAINING:

- 2005, Nov. Advanced Spatial Demography, by Daniel Griffith and Francesco Lagona,  
International Max Planck Research School of Demography, Max Planck  
Institute for Demographic Research, Rostock, Germany
- 2002, June Introduction to Spatial Data Analysis, by Luc Anselin, ICPSR Summer  
Program in Quantitative Methods, The University of California, Santa  
Barbara
- 1994-2004 Multiple ESRI Training Certificates: Introduction to Arc/Info, Introducing  
ArcView, Customize ArcView with Avenue, Using Arc/Info with Grid,  
ArcStorm, ArcScan, Network, Cogo, Tin and Database Design, Designing  
GeoDatabase, Introduction to ArcIMS, Customize ArcIMS with HTML and  
Javascript, Introduction to Geoprocessing Scripts Using Python

#### PROFESSIONAL EXPERIENCE:

- 2006 – Present Associate Professor with tenure, Geospatial Information Sciences, School of  
Economic, Political and Policy Sciences, University of Texas at Dallas
- 2000 - 2006 Assistant Professor, Program in Geographic Information Sciences, School of  
Social Sciences, University of Texas at Dallas
- 1996 - 2000 Research Assistant and Instructor, NASA Affiliated Research Center at the  
Department of Geography, University of South Carolina.

- 1994 - 1996 Director and Certified Instructor, Arc/Info Technical Consulting and Training Center of China, Chinese Academy of Sciences.
- 1993 - 1994 Research Associate, National Laboratory of Resources and Environment Information System, Chinese Academy of Sciences.

### **RESEARCH INTERESTS**

Remote Sensing Digital Image Processing, LIDAR and Hyperspectral Remote Sensing, Neural Network and Fuzzy Logic, Spatial Analysis and Modeling, GIS Application Software Development, and Web-based Mapping and Information Processing.

### **PROFESSIONAL MEMBERSHIP:**

President, 2007-2008, International Association of Chinese Professional in Geographic Information Sciences - Abroad (CPGIS)

Member, American Society for Photogrammetry and Remote Sensing (ASPRS)

Member, Association of American Geographers (AAG)

Member, IEEE Geosciences and Remote Sensing Society (GRSS)

Life Member, International Association of Chinese Professional in Geographic Information Sciences - Abroad (CPGIS)

### **AWARDS AND HONORS:**

- 2006 "Best Web Application" Award (3<sup>rd</sup> place), ESRI International Conference.
- 2006 "CPGIS Go-West Lecture Tour", Travel Award from International Association of Chinese Professionals in Geographic Information Sciences - Abroad.
- 2005 "CPGIS Go-West Lecture Tour", Travel Award from International Association of Chinese Professionals in Geographic Information Sciences - Abroad.
- 2005 "CPGIS Young Scholar Summit", Travel Award from International Association of Chinese Professionals in Geographic Information Sciences - Abroad.
- 2004 "CPGIS Young Scholar Summit", Travel Award from International Association of Chinese Professionals in Geographic Information Sciences - Abroad.
- 2002 "Course Development for Online Instruction" Award from UTD Center for Online Learning and Technology
- 2000 Paul E. Lovingood, Jr. Research Award, 2000, University of South Carolina
- 2000 IEEE Geoscience and Remote Sensing Society 2000 Student Prize Paper Award, Second Prize, Institute of Electrical and Electronics Engineering
- 2000 IGASS 2000 Travel Support Award, Honolulu Hawaii
- 2000 CPGIS 2000 Annual Best Student Paper Award, The International Association of Chinese Professional in Geographic Information Systems
- 1990 - 1993 Outstanding Graduate Student, Chinese Academy of Sciences.
- 1990 Best Bachelor Thesis Award, East China Normal University.
- 1986 - 1990 Fellowship, East China Normal University, Shanghai

### **EXTERNAL FUNDING FOR ORIGINAL INVESTIGATION:**

- 2008 "Urban Forest Inventory Based on Airborne LIDAR and Hyperspectral Imagery" funded by Dallas Urban Forest Advisory Committee, 9/1/2008- 8/31/2009. \$50,000
- 2005 "Efficient Spatial-Temporal Analysis of Environment and Public Health Related

- Data”, with W. Wu and E. Sha, funded by *National Science Foundation* (NSF0513669), 9/1/2005 – 8/31/2008. \$397,504.00
- 2005 “Genetic, Behavioral and Lifestyle Risk Factors for Complications of Type 2 Diabetes in a Mexican American Population in the Lower Rio Grande Valley”, with J. McCormick, funded by *Centers for Disease Control and Prevention* (CDC). 8/1/2005-8/1/2006. \$496,000, (\$42,687 Subcontract to UTD)
- 2005 “Waste-To-Energy: Strategic Geographic Planning Tool Development, Phase II”, with K. Curtin and R. Briggs. Funded by *Environmental Protection Agency* (EPA). 9/1/2005-12/31/2006. \$110,000.
- 2004 “Waste-To-Energy: Strategic Geographic Planning Tool Development”, with R. Briggs, and K. Curtin. Funded by *Environmental Protection Agency* (EPA). 10/1/2004-12/31/2005. \$65,000.
- 2004 "NASA EOS Higher-Education Alliance: Mobilization of NASA EOS Data and Information through Web Services and Knowledge Management Technology for Higher Education Teaching and Research", with L. Di, Z. Xia and W. Luo, funded by the *National Aeronautics and Space Administration* (NASA:E6001682). 2/1/2004-1/31/2009. \$3,000,000 (\$70,000 Subcontract to UTD)
- 2004 “Develop Internet Map Mapping Sites Using ESRI ArcIMS Software for the City of Rowlett”, PI. Funded by *City of Rowlett*, TX. 2004-2005. \$6,000
- 2001 Center of Excellence in Spatial Information Technology, Oracle Corporation Award, 07/01/2002, Software donation worth of \$304,695.00.

## **PUBLICATIONS:**

### **Articles in Peer Reviewed Journals:**

1. Qiu, F., B. Chastain, C. Zhang. 2011. Modeling land suitability/capability using fuzzy evaluation, *GeoJournal*. Accepted.
2. Zhang, C., F. Qiu. 2011. A point-based intelligent approach to areal interpolation, *Professional Geographer*. Vol. 63, No. 2, 262-276.
3. Qiu, F., H. Sridharan, and Y. Chun, 2010. Spatial autoregressive models for population estimation at the block level using LIDAR derived volume information. *Cartography and Geographic Information Systems*. Vol. 37, No. 3, 239-257.
4. Curtin, K. M., K. L. Hayslett-McCall, and F. Qiu, 2010. Determining Optimal Police Patrol Areas with Maximal Covering and Backup Covering Location Models, *Networks and Spatial Economics*, DOI 10.1007/s11067-007-9035-6. Vol. 10, No. 1, 125-145.
5. Qiu, F., 2008. Neuro-fuzzy Based Analysis of Hyperspectral Imagery, *Photogrammetric Engineering and Remote Sensing*, Vol. 74, No. 10, 1235-1247.
6. Zhang, C., G. Chen, and F. Qiu., 2008, Annual amphidromes observed in the atmosphere with remote sensing data, *Journal of Geophysical Research-Atmospheres*, 113, D16112, doi:10.1029/2008JD009864.
7. Qiu, F., B. Li, B. Chastain, and M. Alfarhan, 2008. A GIS based spatially explicit model of dispersal agent behavior, *Forest Ecology and Management*, Vol. 254, No. 3, 524-537
8. Zhang, C., and F. Qiu, 2008. An empirical relationship between sea surface temperature and water vapor: an improvement to the physical model with remote sensing derived data, *Journal of Oceanography*, Vol. 64, No. 1, 163-170.
9. Qian, Y., F. Qiu, J. Chang and K. Zhang, 2008. Visualization informed noise elimination and its application in processing high spatial resolution remote sensing imagery, *Computers and Geosciences*, Vol. 34. No. 1, 35-52
10. Qiu, F., M. Abdelsalam, and P. Thakkar, 2006. Spectral Analysis of ASTER Data Covering Part of Neoproterozoic Allaqi-Heiani Suture, Southern Egypt, *Journal of*

*African Earth Sciences* (Special issue on Remote Sensing Applications to Geological Problems of Africa), Vol. 44, No. 2, 169–180

11. Cooper, J. R. and F. Qiu, 2006. Expediting and Standardizing Stone Artifact Refitting Using a Computerized Suitability Model. *Journal of Archaeological Science*, Vol. 33, 987-998.
12. Xie, Z., and F. Qiu, 2005. Issues on the Use of Variogram-Based Feature Vectors in Content Based Image Retrieval. *The Florida Geographer*, Vol. 36, 41-60
13. Qiu, F., J. Berglund, J.R. Jensen, P. Thakkar and D. Ren, 2004. Speckle Noise Reduction for SAR Imagery Using a Local Adaptive Median Filter, *GIScience and Remote Sensing*, Vol. 41, No. 3, 224-266.
14. Qiu, F. and J.R. Jensen, 2004. Opening the Black Box of Neural Networks for Remote Sensing Image Classification. *International Journal of Remote Sensing*, Vol. 25, No. 9, 1749-1768.
15. Qiu, F., K. Woller and R. Briggs, 2003. Modeling Urban Population Growth from Remotely Sensed Imagery and TIGER GIS Road Data, *Photogrammetric Engineering and Remote Sensing*, Vol. 69, No. 9, September, 2003, 1031-1042.
16. Jensen, J.R., F. Qiu, and K. Patterson, 2001. A Neural Network Image Interpretation System to Extract Rural and Urban Land Use and Land Cover Information from Remote Sensor Data, *GeoCarto International, A Multi-disciplinary Journal of Remote Sensing and GIS*, Vol. 16. No. 1, 19-28.
17. Jensen, J.R., F. Qiu and M. Ji, 1999. Predictive Modeling of Coniferous Forest Age Using Statistical and Artificial Neural Network Approaches Applied to Remote Sensing Data, *International Journal of Remote Sensing*, Vol. 20, No. 14, 2805-2822
18. Li, X. and F. Qiu, 1995. The Application of GPS and GIS in Vehicle Real-time Monitoring, *Remote Sensing Technology and Application*, Vol. 10, No. 2, 33 – 37

#### **Peer Reviewed Book Chapters:**

19. Hayslett-McCall, K.L., F. Qiu, B. Chastain, J. Schubert, and V. Carver, 2008. The Simulation of the Journey to Residential Burglary, In Liu L. and J. Eck (ed.), *Artificial Crime Analysis System: Using Computer Simulation and Geographic Information Systems*, Hershey, PA: Idea Group, pp. 281-299
20. Curtin, K. M., F. Qiu, K. L. Hayslett-McCall, and T. M. Bray, 2005. Integrating Geographic Information Systems and Maximal Covering Models to Determine Optimal Police Patrol Areas, In Fahui Wang (ed.), *Geographic Information Systems and Crime Analysis*. Hershey, PA: Idea Group, pp 214-235.

#### **Peer Reviewed Articles in Conference Proceedings:**

21. Li, C., L. Khan, B. Thuraisingham, M. Husain, S. Chen, and Fang Qiu, 2007. Land Cover Classification and Grouping For Semantic Assessment, IEEE International Conference on Intelligence and Security Informatics (ISI) New Brunswick, NJ, May 23-24, 2007, 255-262.
22. Qian, Y., K. Zhang, and F. Qiu, 2005. Spatial Contextual Noise Removal for Post-classification Smoothing of Remotely Sensed Images, Proc. 20th Annual ACM Symposium on Applied Computing, Santa Fe, USA, 13-17 March 2005, ACM Press, pp. 524-528.
23. Qiu, F. and T. Pathik, 2004, Online Geo-referencing of satellite imagery using GIS Web Services, Proceedings of International Geoscience and Remote Sensing Symposium, IEEE IGARSS 2004 Conference, September 20-24, 2004, Anchorage, Alaska, DVD-ROM 0-7803-8743-0

24. Qiu, F. 2000. Opening the Black Box of Neural Networks with Fuzzy Set Theory to Facilitate the Understanding of Remote Sensing Image Processing, Proceedings of International Geoscienc and Remote Sensing Symposium, IEEE IGARSS 2000 Conference, July 24-28, 2000, Honolulu, Hawaii, pp. 1531-1533 Vol. 4
25. Qiu, F. 1998. Simulation of Seed Dispersal in a Competitive Environment Using a Spatial Behavioral Model, Proceedings of International Conference on Modeling Geographical and Environmental System with Geographical Information System (GIS), Vol. 2, 645-651, June 22-25, 1998, Hong Kong.
26. Qiu F. and G. Cao, 1994. SSDSS: A Prototype of Site Selecting Spatial Decision Support System, Proceedings of Asia GIS/LIS, AM/FM and Spatial Analysis Conference (CD-ROM). March 29 - 31, 1994, Hong Kong.

**Edited Books:**

27. Qiu, F., Y Su, Q. Shao, Y. Sheng, X. Li, and Q. Wang, 1994. *Introduction to Arc/Info*, Chinese Academy of Sciences (Chinese)
28. Shao, Q., Q. Wang, X. Li, and F. Qiu, 1994. *Advanced Arc/Info*, Editor, Chinese Academy of Sciences (Chinese)
29. Qiu, F., Q. Shao, Y. Yao, and S. Li, 1995. *Using Grid and Tin in Arc/Info*, Chinese Academy of Sciences (Chinese)
30. S. Li, and F. Qiu, 1995. *Customize Arc/Info with AML*, Chinese Academy of Sciences (Chinese)
31. Qiu, F., R. Chen, and S. Li, 1995. *Introducing ArcView*, Chinese Academy of Sciences (Chinese)
32. S. Li and F. Qiu, 1995. *Customize ArcView with Avenue*, Chinese Academy of Sciences (Chinese)

**Other Conference Abstract and Presentation:**

33. Qiu, F. and C. Zhang, 2010. Forest Inventory at the Individual Tree Level using Lidar Point Cloud Data, American Society for Photogrammetry and Remote Sensing (ASPRS) 2010 Annual Conference, San Diego, CA, April 26-30.
34. Qiu, F. J. Chang, Z. Lu, and C. Zhang, 2010. Object Based 3D Model Acquisition for Individual Buildings and Trees from Airborne Lidar, GeoWeb 2010, Vancouver, Canada, July 26-30, 2010.
35. Zhang C. and F. Qiu, 2010. Unsupervised Hyperspectral Image Classification Using a Neuro-fuzzy System, Annual Conference of American Association of Geographers (AAG), Washington, DC, April 14-18, 2010.
36. Sridharan H. and F. Qiu, 2010. Population Estimation from An Additional Third Dimensional Perspective, Annual Conference of American Association of Geographers (AAG), Washington, DC, April 14-18, 2010.
37. Qiu, F., C. Zhang, and H. Chen, 2010. An Improved Point Based Areal Interpolation Using K-Nearest Neighbors, The 18th International Conference on Geoinformatics 2010, Beijing, China, June 18-20.
38. Dean D., H. Sridharan and F. Qiu F, 2009. Spectral Separability Analysis of Urban Tree Species Using Spectrometer Measurements, Annual Conference of American Association of Geographers (AAG), Las Vegas, NV, March 22-27, 2009.
39. Chastain B., F. Qiu, F. and F. Mendoza J., 2009. A GIS-based simulation model of seed dispersal with mammalian habitat corridors, Annual Conference of American Association of Geographers (AAG), Las Vegas, NV, March 22-27, 2009.
40. Chang J. and F. Qiu, 2009, Object-Oriented Feature Extraction Based on LIDAR Point Segmentation, American Society for Photogrammetry and Remote Sensing (ASPRS) 2009

- Annual Conference, Baltimore, MD, March 9-13, 2009
41. Qiu F., Bryan Chastain, Haiting Huang, 2009. GWASS: GRASS Web Application Software System enabled by service oriented architecture, American Society for Photogrammetry and Remote Sensing (ASPRS) 2009 Fall Conference, San Antonio, TX, November 16-19, 2009
  42. Fang Qiu, Bryan Chastain, Haiting Huang, Yaochen Qin, Liping Di, 2009. Revitalizing GRASS using service oriented architecture, Geoinformatics 2009 Conference, Fairfax, VA, August 12-14, 2009
  43. Qiu F. and J. Chang, 2008. A 3D Mutual Nearest Neighborhood Based Filtering of Airborne LIDAR Data, Annual Conference of American Association of Geographers (AAG), Boston, MA, April 15-19, 2008.
  44. Chen S. and F. Qiu. 2008, Population estimation based on object-oriented classification of high spatial image at the census block level, ASPRS 2008 Annual Conference, Portland, Oregon, April 28 – May 2, 2008.
  45. Qiu F., 2008, Spectral analysis of hyperspectral imagery based on a neuro-fuzzy system, Advanced Remote Sensing Training Workshop, June 25-26, Hong Kong
  46. Chastain B., F. Qiu, 2008, Modeling residential burglary in a hybrid CA/MAS system with automatic AHP calibration, Geoinformatics 2008, Guangzhou, Guang Dong, China, June 28-29, 2008.
  47. Qiu, F., 2008, Segmentation based airborne LIDAR data filtering and feature extraction, CPGIS 2008 Geomatics Workshop, Harbin, Heilongjiang, China, July 1-2, 2008
  48. Qiu, F. and S. Chen, 2007. Multivariate Spatial Interpolation: A Comparative Study, Annual Conference of American Association of Geographers (AAG), San Francisco, CA, April 17-21, 2007.
  49. Qiu, F., and S. Ibrahim, 2006. Urban Feature Extraction and 3d City Modeling Using LIDAR and High-Resolution Digital Orthophotos, American Association of Geographers Annual Conference, Chicago, IL, USA, 6-11 March 2006.
  50. Qiu, F. 2006. Cellular Automata and Agent-Based Modeling and Simulation of Forest Distribution in a GIS Environment, International Workshop of Forest Landscape Modeling, Beijing, China, 20- 24 June, 2006
  51. Qiu, F., K.M. Curtin, R. Briggs, J. McElory, E. Li and Q. Li, 2006. Waste-to-Energy Strategic Geographic Planning Tool, Land Revitalization Summit, Austin, TX, 30 October – 1 November, 2006
  52. Fang Qiu, 2006. Application Development with Map Service for Use in Classroom Teaching NASA NEHEA/GEOBRAIN Team Meeting, Greenbelt, MD, 12-13, January, 2006
  53. Qiu, F., 2005. Locating Brown Field with Fuzzy Weighted Overlay, American Association of Geographers Annual Conference, Denver, Colorado, April 5- 9, 2005
  54. Sun, F, and F. Qiu, 2004. Towards a Sustainable Development of Chongqing Through Improved Water Resource Management Strategies, Inaugural Conference of the Consortium for Western China Development Studies, Chengdu, Sichuan, China, June 22-23, 2004
  55. Qiu, F. 2004. Fuzzy Membership Mapping of Land Use and land Cover Using Remote Sensing Image. The International Conference on Resources Development and Ecology Protection in Arid Regions, Urumqi, China, June, 25-30, 2004
  56. Qiu, F., and T. Bray, 2003. Design of New Crime Analysis Tools, The American Society of Criminology 55h Annual Meeting, November 19-22, 2003, Denver, Colorado.
  57. Lu, H., F. Qiu, and Y. Cheng, 2003. Temporal and Spatial Distributions of Ozone and Asthma, The 23rd Annual ESRI International User Conference, July 7–11, 2003, San Diego, CA

58. Qiu, F., 2003. Spatial Pattern and Causation Analysis of Childhood Cancer in Texas. The 23rd Annual ESRI International User Conference, July 7–11, 2003, San Diego, CA
59. Qiu, F., K. Woller, and R. Briggs 2002. Prediction of Population based on Road Development and Remote Sensing Change Detection Analysis, American Association of Geographers Annual Conference, March 19-23, Los Angeles, CA
60. Qiu, F. 2001. Invited Speaker, Spatial Database and Geospatial Information Sciences, Higher Education Technology Conferences, co-sponsored by Oracle Corporation and Artrium Communications, Inc. Dec. 7, 2001, Richardson, TX
61. Qiu, F., and J. Murdoch, 2001. Invited Speaker, GI Sciences and Public Health, Meeting on Health Survey of the Lower Rio Grande Valley, University of Texas at Brownsville, September 4, 2001, Brownsville, TX
62. Qiu, F., J. Berglund, and J. R. Jensen, 2001. Speckle Noise Reduction for SAR Imagery with an Improved Adaptive Median Filter, ASPRS 2001 Annual Conference, April 23 to 27, 2001, St. Louis, Missouri
63. Qiu, F. 2000. A New Approach for Remote Sensing Land Cover Classification, Presentation in the 2000 GIS Fall Fair, The North Central Texas Council of Governments, September 27, 2000, Dallas, TX
64. Qiu, F. 1999. Remote Sensing Image Classification Based On Automatic Fuzzy Rule Extraction By Integrating Fuzzy Logic And Neural Network Models, Proceedings of ASPRS 1999 Annual Conference (CD-ROM), May 17- 21, 1999, Portland, Oregon.
65. Jensen, J. R., F. Qiu, 1998. A Neural-network Based System for Visual landscape Interpretation using High Resolution Remotely Sensed Image, Proceedings of ASPRS-RTI 1998 Annual Conference (CD-ROM), March 30 - April 3, 1998, Tampa, Florida.
66. Qiu, F. and J. He, 1995. Serious National Disaster Monitoring and Evaluating System. Proceedings of 1995 ESRI User Conference (CD-ROM), May 22-26, 1995, Palm Springs, California, USA.
67. Qiu F. and W. Gao, 1994. Pingxiang Resource Management and Economic Development Information Systems. Proceedings of The First Arc/Info User Conference in China. pp. 221-227, Beijing, September. 14-16, 1994 (Chinese).
68. Qiu F, 1990. Map Display System Design and Implementing for GIS, Excellent Bachelor Thesis of East China Normal University, ECNU, pp. 106-121, (Chinese).

**Published Technical Reports:**

69. Schill, S., G. Olson, L. Schmidt, F. Qiu, and J. R. Jensen, 2000. Land Management and Appraisal at the Parcel Level Using High Resolution Remote Sensing Data and GIS Modeling Techniques, NASA Affiliated Research Center Final Report. John C. Stennis Space Center, MS, 19pp.
70. Jensen, J. R., J. Berglund, F. Qiu, D. Savercool, and R. E. Godwin, 1998. The zontribution of Active Microwave (RADAR) Remote Sensing to Wetland Delineation, NASA Affiliated Research Center Final Report. John C. Stennis Space Center, MS, 33pp.
71. Jensen, J. R., F. Qiu, and K. Patterson, 1997. Development of Improved Image Classification Algorithms To Extract Quantitative Urban/Suburban Landuse/Land Cover Information from High Spatial Resolution Digital Imagery, NASA Affiliated Research Center Final Report. John C. Stennis Space Center, MS, 20pp.
72. Jensen, J. R., F. Qiu, R. H. Odum, Jr. and S. P. Prisley, 1996. Identification of Forest Cover Types, Age and Density in Southern Brazil Using Landsat Thematic Mapper Data, NASA Affiliated Research Center Final Report. John C. Stennis Space Center, MS, 12pp.

### **Administration and Curricular Development:**

2007-2011      Coordinator, Remote Sensing Graduate Certificate Program  
2002            Graduate Certificate in Remote Sensing, Curriculum Development  
2001            Ph. D. in Geographic Information Sciences, Curriculum Development  
2000            Master in Geographic Information Sciences, Curriculum Development

### **PROFESSIONAL SERVICE**

2010            Vice Chair, Treasurer, Board Member, AAG Spatial Analysis and Modeling Specialty Group  
BOD Member, The International Association of Chinese Professionals in Geographic Information Sciences  
Member, Program Committee, Geoinformatics 2010  
Panelist, NASA Proposal Review  
Reviewer, ISPRS Journal of Photogrammetry and Remote Sensing  
Reviewer, Advances in Space Research  
Reviewer, Computers & Geosciences  
Reviewer, International Journal of Applied Earth Observation and Geoinformation  
Reviewer, Annals of GIS

2009            Newsletter Editor, AAG Spatial Analysis and Modeling Specialty Group  
Member, Program Committee, Geoinformatics 2009  
Reviewer, Computers, Environment and Urban Systems (2times)  
Reviewer, Geographical Analysis  
Reviewer, International Journal of Applied Geography Research  
Reviewer, International Journal of Geographic Information Sciences  
Reviewer, International Journal of Remote Sensing  
Reviewer, Sensor  
Panel Reviewer, National Science Foundation (2 times)

2008            Chair, Technical Committee, Geoinformatics 2008  
Reviewer, Computers, Environment and Urban Systems  
Reviewer, Earth Surface Processes and Landforms  
Reviewer, Computers and Geosciences

2007            Reviewer, International Journal of Geographic Information Sciences  
Reviewer, ISPRS Journal of Photogrammetry and Remote Sensing  
Reviewer, Journal of Geographic Information Sciences  
President Elected, Chair of Membership Committee, International Association of Chinese Professionals in Geographic Information Science.

2006            Panelist for NSF Proposal Review, National Sciences Foundation  
Reviewer, ISPRS Journal of Photogrammetry and Remote Sensing, 2 times  
Reviewer, Urban Remote Sensing Book

2005            BOD member, Chair of Membership Committee, International Association of Chinese Professionals in Geographic Information Science (CPGIS).  
Reviewer, Photogrammetry Engineering and Remote Sensing  
Reviewer, International Journal of Remote Sensing  
Reviewer, GIScience and Remote Sensing  
Member, UTD Information Resources Policy and Planning Advisory Committee.

2004            BOD member, Chair of Awarding Committee, International Association of Chinese Professionals in Geographic Information Science (CPGIS).

Faculty Advisor, UTD Association of Jiangxi Students and Scholars  
 Reviewer, Photogrammetry Engineering and Remote Sensing,  
 Reviewer, International Journal of Risk Assessment and Management  
 Reviewer, Journal of Environment Management  
 Reviewer, GIScience and Remote Sensing  
 Reviewer, Computer, Environment and Urban Systems  
 2003 Reviewer, Photogrammetry Engineering and Remote Sensing, 3 times  
 Reviewer, Software and Practice  
 Reviewer, Computers, Environment and Urban Systems  
 Reviewer, Remote Sensing of Environment  
 2002 Reviewer, Book Chapter, Crime Analysis and GIS  
 External Dissertation Reader for Zhixiao Xie, State University of New York  
 at Buffalo, NY  
 Member, UTD Ad Hoc Committee on High Performance Computing and  
 Network Infrastructure  
 Reviewer, Photogrammetry Engineering and Remote Sensing  
 2001 Reviewer, International Journal of Remote Sensing  
 Reviewer, Geographical & Environmental Modeling  
 Chair, Ph.D. Oral Examining Committee for Dede Weldon Casas  
 Member, UTD Information Resources Policy and Planning Advisory  
 Committee  
 Member, GIS Faculty Search Committee, UTD School of Social Sciences  
 Moderator, Technical Session of ASPRS 2001 Annual Conference  
 2000 - Present Faculty Advisor, UTD Grace Chinese Christian Student Fellowship  
 1996 Vice Chair, Chinese GIS Software Competition Evaluation Committee

**TEACHING EXPERTISE:**

**Classroom Teaching**

Semester	Prefix	Number	Course Name	Enrollment
University of Texas at Dallas				
2010 Fall	GISC	7366	Applied Remote Sensing	12
		5317	Computer Programming For GIS	10
Summer	GISC	7367	Remote Sensing Workshop	6
Spring		6384	Spatial Analysis and Modeling	17
2009 Fall	GISC	7365	Remote Sensing Digital Image Processing	17
		7366	Applied Remote Sensing	7
		5317	Computer Programming For GIS	19
		7367	Remote Sensing Workshop	3
		6384	Spatial Analysis and Modeling	22
2008 Fall	GISC	7365	Remote Sensing Digital Image Processing	16
		7366	Applied Remote Sensing	12
		5317	Computer Programming For GIS	25
Summer	GISC	7367	Remote Sensing Workshop	7
		6384	Spatial Analysis and Modeling	25
2007 Fall	GISC	7365	Remote Sensing Digital Image Processing	22
		7366	Applied Remote Sensing	8
		5317	Computer Programming For GIS	18
		7367	Remote Sensing Workshop	8
Spring	GISC	6384	Spatial Analysis and Modeling	25
		6388	GIS Application Software Development	12

2006 Fall	GISC 7365	Remote Sensing Digital Image Processing	11
	GISC 5317	Computer Programming For GIS	26
Summer	GISC 6379	Internet Mapping and Information Processing	19
Spring	GISC 6384	Spatial Analysis and Modeling	12
	GISC 6384	Spatial Analysis and Modeling	19
2005 Fall	GISC 5317	Computer Programming for GIS	24
	GISC 7365	Remote Sensing Digital Image Processing	11
Summer	GISC 6379	Internet Mapping and Information Processing	21
Spring	GISC 6384	Spatial Analysis and Modeling	13
	GISC 6384	Spatial Analysis and Modeling	15
2004 Fall	GISC 5317	Computer Programming for GIS	17
	GISC 7365	Remote Sensing Digital Image Processing	10
Summer	GISC 6379	Internet Mapping and Information Processing	16
Spring	GISC 5317	Computer Programming for GIS	17
	GISC 6384	Spatial Analysis and Modeling	25
2003 Summer	GISC 7363	Internet Mapping and Information Processing	15
Spring	GISC 6384	Spatial Analysis and Modeling	18
	GISC 7366	Applied Remote Sensing	7
2002 Fall	GISC 5317	Visual Basic Programming for GIS	19
	GISC 7365	Remote Sensing Digital Image Processing	7
Summer	PEOC 6379	Internet Mapping and Information Processing	9
Spring	PEOC 6379	Internet Mapping and Information Processing	14
	PEOC 6384	Spatial Analysis,	19
2001 Fall	PEOC 6379	Visual Basic Programming for GIS,	10
	PEOC 6379	Remote Sensing of Urban and Environment	5
	PEOC 6379	Geographic Information System Master's Project	6
Summer	PEOC 6379	Digital Processing of Remote Sensing Imagery	10
	PEOC 6387	Geographic Information Systems Workshop	11
Spring	PEOC 6384	Spatial Analysis	16
	PEOC 6382	Applied GIS Software	10
2000 Fall	PEOC 6386	Urban and Environmental Application of GIS	5
University of South Carolina			
1999 Summer	GEOG 363	Geographic Information Systems	20
Spring	GEOG 141	Earth From Above	21

#### **Ph.D. Dissertation Supervision (Committee Chair)**

1. Caiyun Zhang, Dissertation on "Urban Forest Inventory Using Airborne Lidar Data And Hyperspectral Imagery". Graduated in summer, 2010. Caiyun Zhang is now a tenure track Assistant Professor at the Florida Atlantic University.
2. Jie Chang, with an emphasis on LIDAR remote sensing. ABD since Spring, 2010. Jie Chang is now working at Earth System Research Institute (ESRI) in Redlands, California
3. Bryan Chastain, with a focus on cellular automata modeling and multi-agent system, ABD since Spring 2009.
4. Harini Sridharan, with an emphasis in remote sensing and population estimation
5. Feng Ni, with an emphasis on parallel processing of LiDAR data

#### **Ph.D. Dissertation Committee Served**

1. Melissa J. Rura, Dissertation on “Eigenvector Spatial Filtering for Image Analysis: An Efficient Algorithm”. Graduated in fall, 2010.
2. Gene A. Feighny, Dissertation on “A Predictive Terrestrial Clutter Model For Ground-To-Ground Automated Target Detection Applications”. Graduated in Fall, 2010. Gene is now with Raytheon.

### **GIS Master Student Supervision**

1. Longbin Zhao, Spring, 2010, “E-Plan Real-Time Chemical Plume Mapping & Geographic Information Reporting System”, Longbin Zhao is China Mobile.
2. Caiyun Zhang, Summer, 2009, “Unsupervised Hyperspectral Image classification using a Neuro-Fuzzy System”, Caiyun is now a tenure track Assistant Professor at the Florida Atlantic University
3. Haiting Huang, Summer, 2009, “Build Event Tracking System with ARCGIS Server Technology”, Haiting is working as a GIS Analyst in the City of Richardson
4. Harini Sridharan, Summer, 2009, “Population Estimation - A Third Dimensional Perspective”. Harini is now working on her Ph.D. degree at the University of Texas at Dallas.
5. Huajun Chen, Spring, 2009, “Point Based Areal Interpolation Using K-nearest Neighbors”, Huajun is now working at the City of Dallas as a GIS Programmer
6. Chanyalew Girmay, “Teff Crop Suitability Analysis based on an Improved Fuzzy Linguistic Ordered Weight Average (FLOWA)”
7. Fernando Jose Mendoza Jara, Summer, 2008, “A GIS based Spatially Explicit Model of Seed Dispersal by Zoochory Agents”, Fernando is now a faculty member at Universidad Nacional Agraria, Nicaragua.
8. Zhixiang Lu, Summer, 2008, “A Construction Of 3d Building Models Using Lidar Data ”, Zhixiang is now working as a research associate in TSP at UT Dallas, TX
9. Shaofei Chen, Spring, 2008, “Estimating population at census block level using object oriented classification”, Shaofei is now a Ph.D. student at UT Dallas.
10. Tanakorn Jangkakul, Fall, 2007, “A web-Service Electrical GIS MapServer Via Open Source GIS Software”, Tanakorn is now working with DataVoice International Inc. at Allen, TX
11. Jianghong Li, Summer, 2007, “Automated Property Notification & Online Updating of Appraisal Data: A GIS Solution for Urban Planning”. Jianghong is working as a GIS Programmer/Analysis at the City of Rowlett, TX
12. Guang Xiao, Spring, 2007, “The Effects of Air Pollution and Socio-economic Status on the Asthma Admission Rates to the Los Angeles Hospitals”. Guang is working as an Application Manager at Spatial Data Inc., at Irving, TX.
13. Jian Hang, Spring, 2006, “Online Distributed GIS System Based on Web Service and ArcGIS Server”. Jian is working as a GIS Programmer in Environment System Research Institute (ESRI) at Redlands, CA.
14. Jeff Bourdier, Summer, 2006, “Areal Interpolation Methods using Land Cover and Street Data”. Jeff is now a GIS analyst at TCEQ.
15. Sulafa Ibrahim, Fall, 2005, “Feature Extraction and 3d City Modeling Using Airborne LIDAR and High-Resolution Digital Orthophotographs”, Sulafa is working as a GIS staff at the City of Dallas.
16. Georgeta Baciu, Fall, 2005, “Hydrological Analysis of Collin County, TX”. Georgeta is working with City of Plano’s Planning Department as a GIS analyst.
17. Stace Maple, Summer, 2005, “Visual Prominence: A topographic variable based upon human perception of the landscape, and its application to archaeological data”. Stace is working at the Yale University as a GIS specialist.

18. Xiaogang Yang, Summer, 2005, "Spatial-Temporal Interpolation of Temperature Using Artificial Neural Networks". Xiaogang is working with City of Allen as a GIS analyst.
19. George Madrid, Spring, 2005, "Locating Potential Brownfield Areas with Fuzzy and Boolean Weighted Overlay in New Orleans" George is now a Ph.D. student at UTD GIS program
20. Zhijun Zou, Spring, 2005, "Implementing Agent-based Modeling in a GIS Environment". Zhijun is working at the City of Arlington, TX as a GIS Developer.
21. Pathik Thakkar, Fall, 2004, "Subpixel Image Analysis with Neural-Fuzzy Classifier". Pathik is working with Environment Research System Institute (ESRI) at Redland, CA as Software Developer II.
22. Caption Siluvairajan, Summer, 2004, "Extending the ArcObjects Programming Model by Implementing Spatial Statistics Using .NET In a Tightly Coupled GIS Environment", Capton is working with Cambridge Systematics Inc. (www.camsys.com) at Tallahassee, FL as a GIS programmer and transportation data modeler.
23. Mohammed S. Alfarhan, Spring, 2003, "Environmental Modeling and Simulation: Seed Dispersal Example". Mohammed is now returning to University of Texas at Dallas to work on his Ph.D. in Geospatial Information Sciences.
24. Marisa Galimbertti, Spring, 2003, "Texas Childhood Cancer Study with GIS and Spatial Data Analysis Approach". She is working with Rural and Community Health Institute, at the Health Science Center of The Texas A&M University.
25. Hua Lu, Fall, 2002, "Spatial and Temporal Relationship of Asthma and Ozone". Hua is working with Emergint Technologies, Inc., CDC Information Technology Contract at Atlanta, GA.
26. Kwabena Prakah-Asante, Spring, 2002, "Application of Spatial Interpolation Techniques and Visual Basic to Obtain Surfaces of Ozone Pollution Concentrations". K.B. went to work with the City of Riverside's Police Department, CA as a GIS analyst.
27. Kevin Woller, Spring, 2001, GIS Master Project, "Urban Growth Detection from Remote Sensing". Kevin is working with Pioneer Natural Resources, USA, Inc. at Irving, TX.