

2. Curriculum Vitae

- Name: Jeong Chang Seong, Ph.D.
- Date: September 14, 2007
- Department: Department of Geosciences, University of West Georgia

1) TEACHING EXPERIENCE

Appointments

| <u>Date</u> | <u>Title</u> | <u>Institution and Department</u> |
|-------------|---------------------|---|
| • 2006- | Associate Professor | Univ. of West Georgia (Geosciences Dept.) |
| • 2005-2006 | Associate Professor | Northern Michigan Univ. (Geography Dept.) |
| • 1999-2005 | Assistant Professor | Northern Michigan Univ. (Geography Dept.) |

Courses Taught at UWG

- *Undergraduate Courses*
 1. Introduction to Geographical Analysis (GEOG 2083)
 2. Introduction GIS and Mapping Science (GEOG 2553)
 3. Geographic Information Systems (GEOG 4553)
 4. Computer Cartography (GEOG 4554)
 5. Introduction to Remote Sensing (GEOG 3563)
 6. Introduction to Image Processing (GEOG 4564)
 7. Airphoto Interpretation and Photogrammetry (GEOG 4562)
 8. Advanced GIS and Spatial Analysis (GEOG 4753)
 9. Directed Problems (GEOG 4082, GEOL 4082)
 10. Internship (GEOG 4086)
- *Graduate Courses*
 1. Geographic Information Systems (GEOG 5553)
 2. Computer Cartography (GEOG 5554)
 3. Remote Sensing (GEOG 5563)
 4. Image Processing (GEOG 6677)
 5. Airphoto Interpretation and Photogrammetry (GEOG 5562)
 6. Advanced GIS and Spatial Analysis (GEOG 6753)
 7. Internship (GEOG 5086)

Programs Developed

- ♦ Geographic Information Systems Certificate Program
- ♦ Geographic Information Systems Concentration
- ♦ Geographic Information Systems Minor

2) SERVICE TO INSTITUTION

Committee Membership

- ♦ Promotion and Tenure Committee. UWG College of Arts and Sciences. 2009-2010.
- ♦ Geosciences Department 3rd Year Review Committee (2010) – Reviewing Dr. Hannes Gerhardt and Dr. Georgina DeWeese
- ♦ Faculty Advisory Committee. UWG College of Arts and Sciences. 2008-2009.
- ♦ Program Review Committee for Department Weaknesses (February 2008 – March 2008)
- ♦ New Faculty Search Committee (Chair, March 2008 – May 2008) – Recruited Dr. Rose.
- ♦ Department Technology Committee, member. Since 2006
- ♦ New Faculty Recruitment Committee, member, 2006 – 2007
- ♦ Educational Technology Resources Policy Committee (NMU), member, 2001 – 2006
- ♦ Academic Senate (NMU), member, 2003 – 2006

Counseling Experiences

- ♦ Advising Students, particularly in GIS programs (minor, major & certificate)
- ♦ Campus Development and Planning Department (UWG), 2006 - 2007
- ♦ Geosciences Department Website Development & Maintenance. Since 2006.
- ♦ GaView Web Development (UWG), 2007
- ♦ Center for Water Resources (UWG), 2007
- ♦ Marquette County Foresters (NMU), 2004 - 2006

Advisement of Student Organization

- ♦ Gamma Theta Upsilon (GTU) honor society, advisor (UWG & NMU), 2001-2008

Participation of Educational Activities

- ♦ STEM Conference at UWG in 2010. Presenter.
- ♦ ArcGIS Workshop (Department of Transportation, GA), Instructor, 2006 - Now
- ♦ Real-time Image Processing workshop (AmericaView). Organizer & instructor, 2007
- ♦ Career Day (NMU), participant, 2005

Participation of Community Activities

- Korean-American Scientists and Engineers Association. Co-Chair, Membership Committee, GA Chapter. Since 2010.
- Korean-American Association for Geospatial and Environmental Sciences. President, 2009-2010.
- Marching in Commencements and Honors Convocation, since 2006
- River Cleanup (UWG), Participant, 2006
- Grace Korean Church, Marquette, Michigan, Service helper from 1999 to 2006

3) ACADEMIC ACHIEVEMENT

Degrees

| <u>Degree</u> | <u>School</u> | <u>Years</u> |
|---------------|---|--------------|
| B.A. | Seoul National University | 1984-1988 |
| M.A. | Seoul National University | 1992-1994 |
| | “The Accuracy of the National Topographic Maps as Geographic Information Systems Data Sources.” Advisor: Dr. Keun B. Yu. | |
| Ph.D. | University of Georgia | 1995-1999 |
| | “Multi-temporal Integrated Global GIS Databases and Land Cover Dynamics: Asia, 1982-1994.” Advisor: Dr. E. Lynn Usery. | |

Honors

- 1st Place Award at the UWG Sigma Xi Science Competition for Big Night 2009.

4) PROFESSIONAL GROWTH

Membership and offices in professional societies:

- Korean-American Scientists and Engineers Association (KSEA) Georgia Chapter. Co-Chair, Membership Committee. Since 2010.
- Korean-American Association for Geospatial & Environmental Sciences (KAGES). President. 2009-2010.
- Cartography and Geographic Information Science. Associate Editor. Since 2008.
- Geographic Information and Technology Association (GITA) (Since 2009)

- ◆ Association of American Geographers (AAG) (Since 1997)
- ◆ American Society for Photogrammetry and Remote Sensing (ASPRS) (Since 1997)
- ◆ Cartography and Geographic Information Science (CAGIS) (Since 2008)

Publications:

1. Mehdi, M.R., Kim, M., **Seong, J.C.**, and Arsalan, M.H. Spatio-temporal Patterns of Road Traffic Noise in Karachi, Pakistan. *Environment International*. (Accepted).
2. Loope, H.M., Loope, W.L., Goble, R.J., Fisher, T.G., Jol, H.M., **Seong, J.C.**, 2010. Early Holocene dune activity linked with final destruction of Glacial Lake Minong, eastern Upper Michigan, USA. *Quaternary Research*, 74:73-81.
3. **Seong, J.C.**, 2009. Characteristics of U.S. Geospatial Industry and Its Prospects. *Proceedings of The 13th International Seminar on GIS*, pp.1-15. KINTEX, Seoul, South Korea.
4. **Seong, J.C.**, Dodge, R., 2009. AmericaView and Broadening Geospatial Applications Horizon: GeorgiaView Case. *Proceedings of GISAK 2009 Spring Conference*, pp. 138-141.
5. **Seong, J.C.**, J. Choi, Y.S. Choi, and H. Yoon, 2008. Applications of Point-to-Point Distances with Regional and Global Datasets. *Geographic Information Science and Remote Sensing*, 45(3): 369-376.
6. Choi, J., and **J.C. Seong**, 2008. Length-Preserving Thinning Algorithm for Line Extraction from Land Cover Data. *Cartographica*, 43(4): 257-266.
7. Choi, J., **Seong, J.C.**, Kim, B., and Usery, E.L., 2008. Innovations in Individual Feature History Management - the significance of Feature-based Temporal Model. *Geoinformatica*, 12: 1-12.
8. **Seong, J.C.** and Choi, J., 2007. GEODIST: A C++ program for calculating geodesic distances with a shapefile. *Computers & Geosciences*, 33(5): 705-708.
<http://dx.doi.org/10.1016/j.cageo.2006.09.005>.
9. **Seong J.C.** 2005. Assessing Resampling Accuracy of Categorical Data Using Random Points. *Cartography and Geographic Information Science*, 32(4):393-400.
http://www.cartogis.org/docs/journal/2005_abstracts.pdf.
10. **Seong, J. C.** 2005. Implementation of an Equal-area Gridding Method for Global-scale Image Archiving. *Photogrammetric Engineering and Remote Sensing*, 71(5): 623-627.
11. **Seong, J.C.** 2003. Modeling the accuracy of image data reprojection. *International Journal of Remote Sensing*, 24(11): 2309-2321.

12. Park, E. J., **Seong, J. C.**, and Hwang, C. S., 2003. A study of drought susceptibility on cropland using Landsat ETM+ imagery. *Korean Journal of Remote Sensing*, 19(2): 107-115.
13. Park, E. J., Hwang, C. S., **Seong, J.C.**, 2002. The analysis of drought susceptibility using soil moisture information and spatial factors involved in satellite imagery. *The Journal of GIS Association of Korea*, 10: 481-492.
14. **Seong, J.C.**, Mulcahy, K.A., and Uery, E.L., 2002. The Sinusoidal Projection: A New Importance in Relation to Global Image Data. *The Professional Geographer*, 54(2): 218-225.
15. **Seong, J.C.**, and Lucas, A.C., 2002. Characterizing Human Impacts on Wetlands Using Satellite Imagery at Seney, Michigan, USA. *The Geographical Journal of Korea*, 36(1): 51-61.
16. **Seong, J. C.**, and Uery, E. L., 2001. Assessing Raster Representation Accuracy Using a Scale Factor Model. *Photogrammetric Engineering and Remote Sensing*, 67(10):1185-1191.
17. Uery, E. L., and **Seong, J. C.**, 2001. All Equal-Area Map Projections Are Created Equal, but Some Are More Equal than Others. *Cartography and Geographic Information Systems*, 28(3):183-193.
18. **Seong, J. C.**, and Uery, E. L., 2001. Fuzzy Image Classification for Continental-scale Multi-temporal NDVI Series Using Invariant Pixels and Image Stratification Method. *Photogrammetric Engineering and Remote Sensing*, 67(3): 287-294.
19. **Seong, J. C.** 2001. Implications of NDVI Changes for Large-area Land Cover Monitoring, Asia, 1983-1994. *Journal of Geography Education* 43:137-151.
20. **Seong, J. C.** 2001. Development of GIS Databases and Applications on the WWW for the Upper Peninsula, Michigan. *Michigan Academician*, XXXIII (3): 243-252.
21. Ock, H. S., Kim, C. H., and **Seong, J. C.**, 2000. An Urban GIS Database Model for an Integrated Land and Building Property Management. *Michigan Academician*, XXXII: 421-437.
22. **Seong, J. C.** 2000. Land Cover Change: Regional Context, Asia, 1983-1994. *Journal of Korean Association of Geographic Information Systems*, 3(2): 37-51.
23. **Seong, J. C.** 2000. Characteristics and Application of Large-area Multi-temporal Remote Sensing Data. *Korean Journal of Remote Sensing*, 16(1): 1-11.
24. **Seong, J.C.** 2000. Multi-temporal NDVI Change Patterns and Global Land Cover Dynamics. *Journal of Korean Association of Geographic Information Systems*, 3(3):20-30.

Grants and Projects Awarded:

- ♦ 2010-2011. Seong, J.C. (Principal) and Rose, S. (Co-PI). Extending the Lidar Project of Coastal Regional Commission of Georgia to Okefenokee National Wildlife Refuge. Funded by the U.S. Geological Survey. \$491,213.
- ♦ 2010 Seong J.C. (Principal), Development of StateView Database Applications. Sponsored by AmericaView. \$10,000.
- ♦ 2009-2010. Seong, J.C. (Principal), StateView Program Development and Operations for the State of Georgia. Sponsored by AmericaView. \$23,099.
- ♦ 2010. Seong, J. C., "Development of Geo-spatial Applications with PG-STEAMER," Sponsored by Pixoneer Geomatics, Inc., \$12,700.
- ♦ 2009. Seong, J. C., "Development of Geo-spatial Applications with PG-STEAMER," Sponsored by Pixoneer Geomatics, Inc., \$11,700.
- ♦ 2008-2009. Seong, J.C. (Principal), StateView Program Development and Operations for the State of Georgia. Sponsored by AmericaView. \$23,099.
- ♦ 2007-2008. Seong, J. C. (Principal) and Dodge, R., "Online Remote Sensing Course Development," Sponsored by AmericaView, \$30,000.
- ♦ 2007-2008. Seong, J. C., "Development of an Automated Land Information Generation System for Local Communities," Sponsored by University of West Georgia, \$1,500 (March 2007 - June 2008).
- ♦ 2007-2008. Seong, J. C., "Development of Geo-spatial Applications with PG-STEAMER," Sponsored by Pixoneer Geomatics, Inc., \$10,000.
- ♦ 2006-2007. Development of Geo-spatial Applications with PG-STEAMER. P.I. Funded by Pixoneer, Inc., DaeJon, South Korea. \$7,700.
- ♦ 2005-2006. Development of Geo-spatial Applications with PG-STEAMER. P.I. Funded by Pixoneer, Inc., DaeJon, South Korea. \$8,200.

Editorships:

- ♦ Cartography and Geographic Information Science. Associate Editor. Since 2008.

Work in progress:

- ♦ Ko, J.H., Chang, S.I., Kim, M., Holt, J., **Seong, J.C.**, Transportation Noise and Exposed Population of an Urban Area in the Republic of Korea. Environment International. (Submitted-Revised-Resubmitted).

- ♦ **Seong, J.C.**, Park, T.H., Ko, J.H., Chang, S.I., Kim, M., Holt, J.B., Mehdi, M.R., Modeling and Visualization of Road Traffic Noise and Estimated Human Exposure: Fulton County Case. (Manuscript Complete. Plan to submit to Environment International)
- ♦ Mehdi, M.R., Arsalan, M.H., Kim, M, **Seong, J.C.**, Kazmi, J.H., Environmental Risk Assessment in Karachi, Pakistan using Geospatial Technologies. (Manuscript under development).

Inviting visiting researchers:

- ♦ Dr. Mohammed R. Mehdi from the NED Engineering University in Karachi, Pakistan. 2009-2010.