Jeong Chang Seong, Ph. D.

Professor. Director of GISCP & GeorgiaView. Department of Natural Sciences, University of West Georgia. 1601 Maple St., Carrollton, GA 30118. Email: <u>jseong@westga.edu</u>. 678-839-4069(O); 770-862-9275(C)



EDUCATION

- 2021 NASA's Applied Remote Sensing Training Program. "Using Google Earth Engine for Land Monitoring Applications". June 16, 13 & 30, 2021.
- Quality Matters (http://QualityMatters.org) online delivery training courses (Courses #1, #2, & #3). March-May 2015.
- 1999 Ph.D., Department of Geography, University of Georgia, Athens, Georgia. Title -"Multi-temporal Integrated Global GIS Databases and Land Cover Dynamics: Asia, 1982-1994" Advisor – Dr. E. Lynn Usery.
- 1994 M.A., Department of Geography, Seoul National University, Seoul, South Korea. Title - "The Accuracy of the National Topographic Maps as Geographic Information Systems Data Sources" Advisor – Dr. K. B. Yu.
- 1988 B.A., Department of Geography, Seoul National University, Seoul, South Korea.
 Economic Geography Major. Business Administration Minor. Social Science Teacher Certificate. ROTC 1st Lieutenant.

APPOINTMENTS

- 2011 current Professor. University of West Georgia
- 2006 2011 Associate Professor. University of West Georgia.
- 2008 Director, GIS Certificate Program at UWG
- 2008 Director, GeorgiaView Consortium.
- 1999 2006 Assistant & Associate Professor. Northern Michigan University. Marquette, Michigan
- 1999 Software Programming Engineer. ERDAS, Inc., Development of Landsat L7A Importer for ERDAS Imagine[™], Version 8.3. Atlanta, GA.
- 1994 1995 Visiting GIS Researcher, Seoul Development Institute, Seoul Korea. Topic: "A Study on the Implementation of GIS for the Seoul City Government" and "Comprehensive Public Information System Plan for Seoul Metropolitan Government."

AREAS OF INTEREST

• Geospatial Big Data Analysis & Visualization, Geospatial Technologies, Medical Geography

COURSES TAUGHT

- GEOG 1113. Landform Geography
- GEOG 1113 Lab. Landform Geography Lab
- GEOG 2553. Introduction to GIS and Mapping Science
- GEOG 3563. Remote Sensing and GIS Integration.
- GEOG 4083. Faculty-mentored Research
- GEOG 4553. Geographic Information Systems

- GEOG 4554. Computer Cartography
- GEOG 4562. Airphoto Interpretation and Photogrammetry
- GEOG 4564. Contemporary Remote Sensing Applications
- GEOG 4753. Contemporary GIS Applications
- GEOG 4755. GIS Database Design
- GEOG 4757. Programming and Customization in GIS
- GEOG 4893. Practicum in GIS.
- GEOG 5551. Introduction to GIS and Mapping Science
- GEOG 5553. Geographic Information Systems
- GEOG 5554. Computer Cartography
- GEOG 5563. Airphoto Interpretation and Photogrammetry
- GEOG 5563. Remote Sensing

ARTICLES, BOOKS, Newsletters (Published)

- 1. 2023. [Journal Editor's Note]. **Jeong Seong,** Santosh Panda and Carter Wang. Editor's Note. The Geographical Bulletin: Vol. 64: Iss. 2, Article 3.
- 2. Available at: https://digitalcommons.kennesaw.edu/thegeographicalbulletin/vol64/iss2/3
- **3.** 2023. [Journal Article, Peer-Reviewed]. Heyward Stober and **Jeong Seong**. GIS-based Spatial and Temporal Analyses of Motor Vehicle Crashes in the Atlanta Metropolitan Region 2017-2021. The Geographical Bulletin: Vol. 64: Iss. 2, Article 12.
- 4. Available at: https://digitalcommons.kennesaw.edu/thegeographicalbulletin/vol64/iss2/12
- 2023. [Journal Article, Peer-Reviewed]. Modeling the Impact of Ocean Temperature Increases on the Distribution of Seagrasses around the Korean Peninsula Using a Machine Learning Technique. Jina Jang, Seohyeon Kim, and **Jeong Seong**. The Geographical Bulletin: Vol. 64: Iss. 2, Article 11.
- 6. Available at: https://digitalcommons.kennesaw.edu/thegeographicalbulletin/vol64/iss2/11
- 2023. [Atlas]. Jeong Seong and Allison Allgood. Georgia Land Cover Image Atlas Volume V: Land Cover 2019 and Community Vulnerability. Published by GeorgiaView. 201p. <u>https://gaview.org</u>.
- 2023. [Journal Article, Peer-Reviewed]. Jeong Seong, Yunsik Kim, Hyewon Goh, Hyunmin Kim, Ana Stanescu. Measuring Traffic Congestion with Novel Metrics: A Case Study of Six U.S. Metropolitan Areas. ISPRS International Journal of Geo-Information. 2023; 12(3):130. https://doi.org/10.3390/ijgi12030130
- 2023. [Book Chapter, Peer-Reviewed]. Jeong C. Seong. Coordinate Transformations. In The Geographic Information Science & Technology Body of Knowledge (4th Quarter 2022 Edition), John P. Wilson (ed.). DOI: 10.22224/gistbok/2023.1.2.
- 10. 2022. [Journal Article, Peer-Reviewed]. Jeong C. Seong, Chul Sue Hwang, Ana Stanescu, Youngho Lee, and Yubin Lee. What Geographers Research: An Analysis of Geography Topics, Clusters, and Trends Using a Keyword Network Analysis Approach and the 2000-2019 AAG Conference Presentations. International Journal of Geospatial and Environmental Research, Volume 9, Number 1, Article 1. <u>https://dc.uwm.edu/ijger/vol9/iss1/1</u>.
- 11. 2022. [Journal Article, Peer-Reviewed]. Ana Stanescu, Jeong Chang Seong, Yubin Lee, and Chul Sue Hwang. A Picture of Geography Revealed by a Keyword Network Analysis of the 2020 AAG Conference. The Korean Association of Professional Geographers Journal, 56(3): 177-187. <u>https://doi.org/10.22905/kaopgi.2022.56.3.3</u>
- 12.2022. [Atlas]. Jeong Seong and William Anderson. Georgia Land Cover Image Atlas Volume IV: Rivers and Imperviousness. Published by GeorgiaView. 201p. <u>https://gaview.org</u>.
- 13. 2021. [Atlas]. **Jeong Seong**, Jessica Sinel, and Benjamin Shirley. Georgia Land Cover Image Atlas Volume III: Forest Change. Published by GeorgiaView. 201p. <u>https://gaview.org</u>.
- 14. 2021. [Journal Article, Peer-Reviewed]. Sanghoon Ji, Jeong Seong, Ana Stanescu, Chul Sue Hwang, and Yubin Lee. Spatiotemporal Traffic Database Construction with Google Real-time Traffic Information and Spatiotemporal Congestion Pattern Analysis: A Case Study of Montgomery County, Maryland, U.S.A., Journal of the Korean Geographical Society 56(3): 265-

276. URL: https://journal.kgeography.or.kr/articles/pdf/PwZy/geo-2021-056-03-0.pdf. DOI: https://doi.org/10.22776/kgs.2021.56.3.265

- 15. 2021. [Newsletter Article]. Jeong Chang Seong, Sanghoon JI, Ana Stanescu, Yubin Lee, and Chul Sue Hwang. What will be Presented at the 2021 AAG Meeting? AAG Newsletter April Issue. <u>http://news.aag.org/2021/04/what-will-be-presented-at-the-2021-aag-meeting/</u>. DOI: 10.14433/2017.0088
- 16. 2020. [Journal Article, Peer-Reviewed]. Yubin Lee, Youngho Lee, Jeongchang Seong, Ana Stanescu, Sanghoon Ji, Chulsue Hwang. An Analysis of the Latest Trends and Topics in Geography Research Using Topic Modeling. Journal of the Korean Geographical Society 55(6): 589-599. <u>https://journal.kgeography.or.kr/articles/pdf/bOWQ/geo-2020-055-06-3.pdf</u>. DOI: https://doi.org/10.22776/kgs.2020.55.6.589
- 17.2020. [Newsletter Article]. Jeong Chang Seong, Chul Sue Hwang, Ana Stanescue, Yubin Lee, and Youngho Lee. What will be Presented at the 2020 AAG Meeting? AAG Newsletter February Issue. <u>http://news.aag.org/2020/02/what-will-be-presented-at-the-2020-aag-meeting/</u>. DOI: 10.14433/2017.0068
- 18. 2020. [Atlas]. **Jeong Seong**, Jordan Woodall, Jessica Sinel. Georgia Land Cover Image Atlas Volume II: Croplands (2018). Published by GeorgiaView. 201p. <u>https://gaview.org</u>.
- 19. 2020. [Journal Article, Peer-Reviewed]. Lee, Youngho; Lee, Yubin; Seong, Jeong; Stanescu, Ana; and Hwang, Chul Sue. A Comparison of Network Clustering Algorithms in Keyword Network Analysis: A Case Study with Geography Conference Presentations. International Journal of Geospatial and Environmental Research: Vol. 7 : No. 3, Article 1. Available at: <u>https://dc.uwm.edu/ijger/vol7/iss3/1</u>
- 20. 2020. [Journal Article, Peer-Reviewed]. Imran Ahmed Khan, Mudassar Hassan Arsalan, Mohammed Raza Mehdi, Jamil Hasan Kazmi, Jeong Chang Seong, Daikwon Han. Assessment of asthma-prone environment in Karachi, Pakistan using GIS modeling. J Pak Med Assoc. 2020 Apr;70(4):636-649. doi: 10.5455/JPMA.11828. <u>https://pubmed.ncbi.nlm.nih.gov/32296208/</u>.
- 21.2019. [Atlas]. Jeong Seong. Georgia Land Cover Image Atlas Volume I: Impact of Urbanization. Published by GeorgiaView. 201p. <u>https://gaview.org</u>.
- 22. 2019. [Journal Article, Peer-Reviewed]. Yubin Lee, Youngho Lee, **Jeong Seong**, Ana Stanescu, Taekeon Hwang, Chul Sue Hwang. Analysis of GIS Research Trends in the U.S. with AAG Conference Presentations from 2000-2019. The Geographical Journal of Korea, 53(4), 495-508. http://www.kaopg.or.kr/contents/bbs/bbs_content.html?bbs_cls_cd=002002003&cid=2004241649 2390
- 23. 2018. [Journal Article, Peer-Reviewed]. Mohammed Raza Mehdi, Mudassar Hassan Arsalan, Uneb Gazder, Minho Kim, **Jeong Chang Seong**, Anil Namdeo, Seo II Chang. Who is the bigger culprit? Studying impacts of traffic and land use on noise levels in CBD area of Karachi, Pakistan. Environ Dev Sustain (2018) 20:1421–1438. https://doi.org/10.1007/s10668-017-9941-9.
- 24. 2018. [Atlas]. J.C. Seong, A. Ivester, J.H. Kim, & H.J. Jung. The National Atlas of Korea for Children. Editor in Chief: C.S. Hwang. Published by National Geographic Information Institute, South Korea. URL: <u>http://nationalatlas.cafe24.com/pages/page_1172.php</u>?
- 25. 2017. [Proceedings Article, Peer-Reviewed]. J.C. Seong, C.S. Hwang, R. Gibbs, K. Roh, M.R. Mehdi, C. Oh, & J.J. Jeong. Landsat Big Data Analysis for Detecting Long-term Water Quality Changes: A Case Study in the Han River, South Korea. ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences, Volume IV-1/W1 (pp. 83-89). https://doi.org/10.5194/isprs-annals-IV-1-W1-83-2017. Note: This paper is an example of Landsat imagery big data analysis.
- 26. 2015. [Journal Article]. J.C. Seong. Sun Position Calculator (SPC) for Lansdsat Imagery with Geodetic Latitudes. Computers & Geosciences 85, pp. 68-74. Note: This paper is about the calculation of the Sun's properties at each pixel in a satellite imagery that are required to calculate solar energy potentials.
- 27. 2013. S. Rose, J.C. Seong, J. Ogle, E. Butte, J. Indridason, J. Hall, S. Nelson, T. Jones, & J. Humphry. 2013. Challenges and Lessons from a Wetland LiDAR Project: A Case Study of the Okefenokee Swamp, Georgia, USA. Geocarto International, 28(3): 210-226. Note: This paper is about the U.S. Geological Survey's LiDAR and digital elevation data collection project performed by Dr. Seong and Dr. Rose for the Ware and Charlton Counties in Georgia.

- 28. 2012. M. Kim, S.I. Chang, J.C. Seong, J. Holt, T. Park, J. Ko, & J. Croft. 2012. Road Traffic Noise: Annoyance, Sleep Disturbance, and Public Health Implications. American Journal of Preventive Medicine. 43(4): 353-360. Note: This paper was developed from a collaboration with the Centers for Disease Control and Prevention in Atlanta, Georgia.
- 29. 2012. Naqi S, Kazmi S, **Seong J.** Natural Gas Demand and Supply Modeling with Geospatial Technologies. International Journal of Energy Sector Management 6(3):365-380.
- 30.2011. Jeong C. Seong, Tae H. Park, Joon H. Ko, Seo I. Chang, Minho Kim, James B. Holt, and Mohammed R. Mehdi. Modeling of Road Traffic Noise and Estimated Human Exposure in Fulton County, Georgia, USA. Environment International 37: 1336-1341.
- 31. 2011. Mohammed Raza Mehdi, Minho Kim, Jeong C. Seong and Mudassar Hassan Arsalan. Spatio-temporal patterns of road traffic noise pollution in Karachi, Pakistan. Environment International 37 (2011) 97–104.
- 32. 2011. 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. 37 (2011) 328– 334.
- 33.2011. Jeong C. Seong, Habtewold Kassa, David Choi. Modeling and Mapping Traffic-Congested Corridors for Statewide Decision Support. Advances in Cartography and GIScience Volume 2 -Selection from ICC 2011, Paris. Anne Ruas (Editor). pp.449-456. Springer. 2011. (Book Chapter).
- 34. 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.
- 35. 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.
- 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.
- **37**. Choi, J., and **J.C. Seong**, 2008. Length-Preserving Thinning Algorithm for Line Extraction from Land Cover Data. *Cartographica*, 43(4): 257-266.
- 38. 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.*
- 39. 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.
- 40. 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.
- 41. 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.
- 42. Seong, J.C. 2003. Modeling the accuracy of image data reprojection. *International Journal of Remote Sensing*, 24(11): 2309-2321.
- 43. 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.
- 44. 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.
- 45. Seong, J.C., Mulcahy, K.A., and Usery, E.L., 2002. The Sinusoidal Projection: A New Importance in Relation to Global Image Data. *The Professional Geographer*, 54(2): 218-225.

- 46. 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.
- 47. Seong, J. C., and Usery, E. L., 2001. Assessing Raster Representation Accuracy Using a Scale Factor Model. *Photogrammetric Engineering and Remote Sensing*, 67(10):1185-1191.
- 48. Usery, 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.
- 49. Seong, J. C., and Usery, E. L., 2001. Fuzzy Image Classification for Continental-scale Multitemporal NDVI Series Using Invariant Pixels and Image Stratification Method. *Photogrammetric Engineering and Remote Sensing*, 67(3): 287-294.
- 50. Seong, J. C. 2001. Implications of NDVI Changes for Large-area Land Cover Monitoring, Asia, 1983-1994. *Journal of Geography Education* 43:137-151.
- 51. Seong, J. C. 2001. Development of GIS Databases and Applications on the WWW for the Upper Peninsula, Michigan. *Michigan Academician*, XXXIII (3): 243-252.
- 52. 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.
- 53. Seong, J. C. 2000. Land Cover Change: Regional Context, Asia, 1983-1994. Journal of Korean Association of Geographic Information Systems, 3(2): 37-51.
- 54. Seong, J. C. 2000. Characteristics and Application of Large-area Multi-temporal Remote Sensing Data. *Korean Journal of Remote Sensing*, 16(1): 1-11.
- 55. **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 (Only the funded projects are listed below.)

- 2023. Seong, J.C. (PI), National Atlas of Korea English Version (Atlas Project #9). Funded by The Korean Geographical Society. \$20,741.
- 2022-2023. Seong, J.C. (PI), Ana Stanescu (Co-PI). High Potential Individuals Global Training Program. Funded by The Korean Government. \$38,063.33
- 2022-2023. Seong, J.C. (PI), National Atlas of Korea English Version (Atlas Project #8). Funded by The Korean Geographical Society. \$15,992.44.
- 2022-2023. Seong, J.C. (PI), StateView Program Development and Operations for the State of Georgia. Sponsored by AmericaView. \$23,500.
- 2021-2023. Seong, J.C. (PI), Coastal Development & Vector-borne Disease in the Gulf Coast. Sponsored by Leto Science. \$10,000.
- 2021-2022. Seong, J.C. (PI), StateView Program Development and Operations for the State of Georgia. Sponsored by AmericaView. \$23,500.
- 2021-2022. Seong, J.C. (PI), Ana Stanescu (Co-PI). High Potential Individuals Global Training Program. Funded by The Korean Government. \$43,638
- 2021-2022. Seong, J.C. (PI), National Atlas of Korea English Version (Atlas Project #7). Funded by The Korean Geographical Society. \$18,644.
- 2020-2021. Seong, J.C. (PI), StateView Program Development and Operations for the State of Georgia. Sponsored by AmericaView. \$23,500.
- 2020-2021. Seong, J.C. (PI), National Atlas of Korea English Version (Atlas Project #6). Funded by The Korean Geographical Society. \$17,600.

- 2020-2021. Seong, J.C. (PI), Ana Stanescu (Co-PI). High Potential Individuals Global Training Program. Funded by The Korean Government. \$16,108.
- 2019-2020. Seong, J.C. (PI), National Atlas of Korea English Version (Atlas Project #5). Funded by The Korean Geographical Society. \$27,585.
- 2019-2020. Seong, J.C. (PI), StateView Program Development and Operations for the State of Georgia. Sponsored by AmericaView. \$23,500.
- 2019-2020. Seong, J.C. (PI), Ana Stanescu (Co-PI). High Potential Individuals Global Training Program. Funded by The Korean Government. \$50,715.
- 2018-2019. Seong, J.C. (PI), Geographic Education and Understanding through the National Atlas of Korea (Atlas Project #4). Funded by The Korean Geographical Society. \$20,085.
- 2018-2019. Seong, J.C. (PI), StateView Program Development and Operations for the State of Georgia. Sponsored by AmericaView. \$23,500.
- 2017-2018. Seong, J.C. (PI). A study on designing maps for improving the spatial cognition of K-12 students (Korea Atlas Project #3). Funded by The Korean Geographical Society. \$16,000.
- 2016-2017. Seong, J.C. (PI), StateView Program Development and Operations for the State of Georgia. Sponsored by AmericaView. \$24,000.
- 2016-2017. Seong, J.C. (PI) and Shea Rose (co-PI). Cartographic Perspectives of the Korean Peninsula (Korea Atlas Project #2). \$10,000.
- 2015-2016. Seong, J.C. (PI), StateView Program Development and Operations for the State of Georgia. Sponsored by AmericaView. Funded by The Korean Geographical Society. \$24,000.
- 2015-2016. Seong, J.C. (PI). Cartographic Perspectives of the Physical Geography of the Korean Peninsula. (Korea Atlas Project #1). Funded by The Korean Geographical Society. \$8,400.
- 2014-2015. Seong, J.C. (PI), StateView Program Development and Operations for the State of Georgia. Sponsored by AmericaView. \$24,000.
- Dr. Seong sponsored the UWG LSAMP program for undergraduate student research (Sesame Bowens and Zach Little). \$2,000.
- 2013-2014. Seong, J.C. (PI), StateView Program Development and Operations for the State of Georgia. Sponsored by AmericaView. \$24,000.
- 2008-2013. Seong, J.C. (PI), StateView Program Development and Operations for the State of Georgia. Sponsored by AmericaView. \$142,000.
- 2006-2012. Seong, J. C., "Development of Geo-spatial Applications with PG-STEAMER," Sponsored by Pixoneer Geomatics, Inc., \$80,700.
- 2010-2011. Seong, J.C. (PI) and Rose, S. (Co-PI). Extending the Lidar Project of Coastal Regional Commission of Georgia to Okefenokee National Wildlife Refuge. \$491,213. Funded by the U.S. Geological Survey.
- 2010. Seong J.C. (PI), Development of StateView Database Applications. Sponsored by AmericaView. \$10,000.
- 2009. UWG SRAP. \$2,000.
- 2007-2008. Seong, J.C. (PI) and Dodge, R., "Online Remote Sensing Course Development," Sponsored by America View, \$30,000.
- 2006-2007. UWG Faculty Research Grant.
- 2000-2002. "Methods to Achieve Accurate Projection of Regional and Global Raster Databases". \$93,126. Sponsored by the US Geological Survey.

AWARDS

- 2001. ERDAS Best Science Paper in Remote Sensing Award.
- 2011. UWG College of Science and Math (COSM) Excellence in Research Award.
- 2020. Outstanding Service Award by the AmericaView Consortium.

PRESENTATIONS

- 2023. Jeong Seong, Yunsik Kim, Hyewon Goh, Ana Stanescu. Development of a Traffic Congestion Index from Spatiotemporal Big Data for Urban Transportation Research and Applications. AAG 2023. Denver, CO.
- 2023. Hyewon Goh, Jeong Seong, Yunsik Kim, Ana Stanescu. Does Traffic Congestion Increase Vehicle Crashes? A Regional Scale Study with a Novel Congestion Index and Machine Learning Methods. AAG 2023. Denver, CO.
- 2023. Yunsik Kim, Jeong Seong, Hyewon Goh, Ana Stanescu. Modeling the Probabilities of Vehicle Crashes Using Machine Learning Methods with Congestion Amounts and Spatiotemporal Features at Montgomery County, Maryland. AAG 2023. Denver, CO.
- 2021. Sanghoon Ji, Jeong Seong, Yubin Lee, Ana Stanescu, Chul Sue Hwang. An Exploratory Spatial Pattern Analysis Using a Traffic Congestion Data-Mining Approach with an Online Map Service. AAG at Seattle, WA. 4/9/2021.
- 2020. Jeong Seong, Ana Stanescu, Youngho Lee, Yubin Lee, Chul Sue Hwang. Analysis of the 1998-2019 AAG Presentations. AAG at Denvor, CO. 4/6-10,2020. (Virtual)
- 2020. Yubin Lee, Youngho Lee, Ana Stanescu, Chul Sue Hwang, Jeong Seong. Analysis of GIS Research Trends with the 1998-2019 AAG Conference Presentations. AAG at Denvor, CO. 4/6-10,2020. (Virtual)
- 2020. Youngho Lee, Yubin Lee, Ana Stanescu, Chul Sue Hwang, Jeong Seong. A Comparison of Network Clustering Algorithms for Keywords Network Analysis. AAG at Denvor, CO. 4/6-10,2020. (Virtual)
- 2019. J.C. Seong, J. Woodall, D. Moye, D. Seong. Georgia Image Atlas I: Urbanization. AAG at Washington, D.C. 4/6/2019.
- 2019. Youngho Lee, Yubin Lee, A. Stanescu, Jeong Seong. Summarizing the 2019 AAG Conference Presentations Using Keyword Network Analysis. SEDAAG at Wilmington, NC. 11/25/2019
- 2018. J.C. Seong. Modelling Solar Energy Potential for Green and Sustainable Urban Environment. AAG at New Orleans, LA. 4/11/2018.
- 2018. C.S. Hwang, J.C. Seong. A. Ivester, S.H. Won. Introducing the National Atlas of Korea for Children. IGU at Quebec. 8/7-10/2018.
- 2017. J.C. Seong. Analysis of Spectral Reflectances of Microcystis Aeruginosa. AAG at Boston, MA. 4/5-9,2017.
- 2016. J.C. Seong, R. Gibbs, C. Oh, J. Jeong, C S Hwang. Landsat Big Data Analysis for Water Quality Analysis. AAG at San Francisco, CA. 3/29-4/2, 2016.
- 2015. Seong, J.C., Sun Position Calculator (SPC) for Landsat Imagery. AV FTM 2015 at USGS EROS Data Center, Sioux Falls, SD. 10/22-23/2015.
- 2015. Seong, J.C., AVUNIV An Online Remote Sensing Course. Association of American Geographers 2014 Annual Conference, Chicago, IL. 2014-APR-24.
- 2014. Seong, J.C., Development of an ArcGIS Application for Solar Zenith Angle Calculation. Association of American Geographers 2014 Annual Conference, Tampa, FL. 2014-APR-11.

- 2013. Seong, J.C., Park, T.H., Chang, S.I., Kim, M., and Ko, J.H., Road Traffic Noise and Human Health. Association of American Geographers 2013 Annual Conference, Los Angeles, CA. 2013-APR-11.
- 2013. Seong, J.C., A Study on Archiving Global-Scale Image Datasets Most Accurately and Efficiently. 2013/10/11 KSRS Conference. ChonAn, South Korea.
- 2012. Seong, J.C., Ogle, J., Tripp, C., and Gubran, Z., Urban Heat Islands and the Importance of Green Spaces in Metro Atlanta, Georgia. International Symposium on Remote Sensing, Songdo, South Korea. 2012-OCT-10_12.
- 2012. Seong, J.C., Mapping Noise and Health Implications. COSM Dean's Research Seminar Series, UWG, Carrollton, GA. 2012-NOV-2.
- 2010. Jeong Chang Seong, Joon Hee Ko, Seo II Chang, Tae Ho Park, Minho Kim, James Holt and Mohammed Mehdi. Modeling and Visualization of Traffic Noise with Its Implications to Community Health: Fulton County Case. ASPRS-CAGIS Joint Conference. Orlando, FL. 2010/11/17.
- 2010. Jeong C. Seong and Shea Rose. Experience from the LiDAR Project of Okefenokee National Wildlife Refuge. AmericaView Fall Technical Meeting. Madison, WI. 2010/10/11.
- 2010. Mohammed R. Mehdi and Jeong C. Seong. Use of Radar Imagery for Investigating Urban Land Cover Changes through Angle Method. ASPRS. San Diego, CA. 2010/04/27.
- 2010. Jeong C. Seong. AmericaView University: Teaching Remote Sensing via Online. UWG STEM Conference. 2010/02/19.

Directing Student Research and Presentation

- 2023 Heyward Stober (Advisor: Dr. Seong). Spatial and Temporal Analysis of Automotive Accidents in the Metro Atlanta Region. April 4, 2023. Poster presentation at the UWG Scholar's Day.
- 2022 William Anderson (Advisor: Dr. Seong). Spatial Analysis of Natural Disasters in Sri Lanka from 1988-2021. Poster presentation at the UWG Scholar's Day.
- 2022 David Lauria (Advisor: Dr. Seong). Loss of Greenness in Metro Atlanta: 2001 2019. Poster presentation at the UWG Scholar's Day.
- Bryant Brough, Jessica Sinel, Benjamin Shirley, and David Lauria. (Advisor: Dr. Seong).
 "Using UAS Drone Orthophotography to Model Changes to UWG's Campus". 2021-Apr-06. UWG Scholar Day.
- 2020 Patrick Manella. (Advisor: Dr. Seong). "A High Resolution UWG Drone Orthophoto with OpenDroneMap Cluster Computing". 2020-Apr-07. UWG Scholar Day.
- 2018 Katelyn Griczin, Colton Wheeler and Michael Griffin. (Advisor: Dr. Seong). The effect of wetness, greenness, and brightness on land surface temperature. Presented at the 2018 UWG Scholar Day.
- 2018 Benjamin Brown, Blair Carroll, Dakota Carruthers, and Drew Hayles. (Advisor: Dr. Seong). Studying the Relationship between Water Bodies and Their Temperatures Using Geographic Information Systems and Satellite Remote Sensing Techniques. Presented at the 2018 UWG Scholar Day.
- 2018 Henrick Gordon, Haley Patterson, William Purcell, and Juanyae Wilson. (Advisor: Dr. Seong). An Investigation into the Relationship between the Color and Temperatures of Man-made Materials in the Atlanta, Fulton Industrial Complex. Presented at the 2018 UWG Scholar Day.
- 2018. Michael Griffin. (Advisor: Dr. Seong). Optimal Flight Altitude for Drone Imagery. Presented at the 2018 UWG Scholar Day.
- 2017 Chih Hsiao and Kilandra Dollar. J. Seong (Advisor), 2017-04-04, "Urban Heat Island Effect in the Atlanta Area". Presented at the 2017 UWG Scholar Day.

- 2017 Grace Mitchell. J. Seong (Advisor). 2017-04-04. "Accuracy of Orthophotos Generated from Drone Imaging". Presented at the 2017 UWG Scholar Day.
- 2017 Steven Whatley. J. Seong (Advisor). 2017-04-04. "Detecting Lava Flows with Thermal Imaging". Presented at the 2017 UWG Scholar Day.

UNIVERSITY SERVICES (Recent)

- 2016-now: UWG GIS Club advisor
- 2020: Making UWG campus image maps with high-resolution drone photos (2020 & 2021). The 2020 map was delivered to the University's Planning and Construction Services.
- 2020: UWG CACSI Graduate Committee. UWG CACSI Diversity Committee.
- 2017-18: UWG COSM P&T Committee.

CONNECTION TO COMMUNITY

- 2022-08-29. Earth Observation Day with UWG Geoscientists. 9:00am-12:30pm. With 31 students and 4 teachers from Carrollton High School.
- 2020-11-14. iDrone Camp Coordinator. 90 K-12 students from multiple states. Virtual drone building and programming workshop for 8 hours (11:00am-7:00pm).
- 2020-10-13. Hosting the "Knowing the World Romania" presentation. Presenter: Dr. Ana Stanescu. Participants: 16 UWG undergraduate students. Virtual presentation.
- 2019-07-12~29. KHU Geospatial Workshop. UWG Campus. 27 Participants.
- 2018-07-11~28. KHU Geospatial Workshop. UWG Campus. 27 Participants.
- 2018-06-23. Drone Workshop. UWG Newnan Campus. 11 participants. Dr. Seong provided a drone workshop with UWG Continuing Education.
- 2017-10-10. Hosting Earth Observation Day. UWG Campus. Satellite Imagery were displayed, and undergraduate students participated in online activities. 50 participants.
- 2017-07-12~29. KHU Geospatial Workshop. UWG Campus. 27 Participants.
- 2016-03-24. Hosting the Earth Observation Day (EOD). A tour of the Geosciences department and a workshop on Remote Sensing were given to the high school seniors at Coweta County PLC. There were 27 high school students and two teachers.
- 2016-07-11~28. KHU Geospatial Workshop. UWG Campus. 30 Participants.
- <u>2015 US-Korea Conference on Science, Technology and Entrepreneurship</u>, Atlanta Georgia. Dr. Seong participated in the conference as a local organizing committee member. 7/29-8/1, 2015.
- <u>Rotorworks LLC</u>, Dallas GA. Rotorworks is a LiDAR surveying company. On 2/28/2014, Dr. Seong hosted a one-day workshop for developing undergraduate student internships.
- <u>S-Nelson & Associates</u>. Dallas, GA. S-Nelson & Associates is a surveying and mapping company. Dr. Seong worked with the company for the 2010-2011 Okefenokee Swamp LiDAR project (funded), and developed a proposal (unfunded) for the LiDAR survey of the Douglas County, GA.
- <u>Georgia Department of Transportation</u>. Dr. Seong has worked with GDOT for many years particularly for teaching GIS and planning road traffic/capacity.
- <u>CDC.</u> Dr. Seong has worked with The Centers for Disease Control and Prevention for many years. Dr. Seong's partner has been the Community Health department.
- <u>Atlanta Regional Commission (ARC).</u> Dr. Seong's has worked with ARC regarding road traffic noise and air quality.
- <u>Georgia DNR.</u> Dr. Seong has worked with GA EPD.

• <u>Local High Schools.</u> Dr. Seong hosted science workshops, summer internships, and various events regarding mapping science, remote sensing, and GIS. Students from Mt. Zion, Carrollton Central, and Newnan Performance Learning Center have joined the programs.

• Sponsoring J-1 Visiting Scholars

2022: Yunsik Kim, Hyewon Goh, Juhyun Lee.

- 2021: Seolim Cho, Hyeokjin Hong, Hyunmin Kim, Yoon Sook Hwang
- 2020: Wonjin Cho, Sanghoon Ji
- 2019: Yubin Lee, Youngho Lee, Donghoe Koo, Gijong Cho
- 2018: Hee Min Park
- 2017: Jong Sool Choi
- 2016: Kwanhun Roh, Jisun Min, Eun Soo Lee
- 2015: Chul Sue Hwang, Chung won Oh
- 2014: Young In Moon, Jae Jun Jeong
- 2013: Seongyong Yang, Sung Cheol Lee, Wonho Lee
- 2011: Byung C. Park
- 2009: Taeho Park, Mohammed Mehdi, Seoil Chang

PROFESSIONAL ASSOCIATIONS

- Association of American Geographers (AAG) (Since 1997). https://www.aag.org/
- Georgia Geospatial Association (Since 2020). https://gageospatial.org/
- Georgia Science Teachers Association (Since 2020). https://www.georgiascienceteacher.org/
- Korean-American Association for Geospatial & Environmental Sciences (KAGES). Since 2009. <u>https://kages.org</u>
- Cartography and Geographic Information Science. Associate Editor. 2008-2014.
- American Society for Photogrammetry and Remote Sensing (ASPRS) (1997-2014)
- Korean-American Scientists and Engineers Association (KSEA) Georgia Chapter. Chair, Membership Committee. Since 2010.

WOEKSHOP PARTICIPATION

- 2023-03-14. Interactive cloud computing with Google Earth Engine and geemap. By Dr. Qiusheng Wu. At University of Louisiana, Lafayette, LA.
- 2023-03-15. ESRI StoryMaps: Behind the Scenes. By Dr. Bradley Shellito. At University of Louisiana, Lafayette, LA.
- 2023-03-15. Raster-Based Spatial Analysis in R. By Dr. Aaron Maxwell. At University of Louisiana, Lafayette, LA.