

JINWOO PARK, PH.D.

Department of Geography & Geographic Information Science
 University of Illinois at Urbana-Champaign
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RESEARCH INTEREST

Geographic Information Science; Spatial Accessibility; Geospatial Data Science; CyberGIS; 3D Indoor GIS; Spatial Optimization; Geocoding; Geocomputation.

EDUCATION

Ph.D., Department of Geography, Texas A&M University, USA	2021
Advisor: Dr. Daniel W. Goldberg	
Dissertation Title: Advancing Spatial Accessibility Measurements to Urban Infrastructure: Uncovering Temporal Dynamics and Uncertainty	
M.S., Department of Geography, Kyung Hee University, Republic of Korea	2016
Advisor: Dr. Jinmu Choi	
Thesis Title: Comparison of Address Coordinates with the Change in Korean Address System	
B.S., Department of Geography, Kyung Hee University, Republic of Korea	2013

PROFESSIONAL EXPERIENCE

University of Illinois at Urbana-Champaign	
Postdoctoral Research Associate, CyberGIS Center for Advanced Digital and Spatial Studies	2022–Present
Texas A&M University	
Graduate Assistant Non-Teaching, Division of Information Technology	2018–2021
Graduate Assistant Teaching, Department of Geography	2017
Kyung Hee University	
Administrative Staff, Department of Geography	2016–2017
Engineer & Student Assistant, Spatiotemporal Big Data Center	2014–2017
Research Assistant, Spatial Analysis Lab	2014–2017
Teaching Assistant, Department of Geography	2014–2015
IMU Korea (Intergraph Mapping & Utilities Korea Ltd.)	
Researcher & Software Engineer	2012–2014

AWARDS AND HONOR

Honorable Mention, 2021 Paper Awards, University Consortium for Geographic Information Science (UCGIS) Symposium 2021, Virtual.	2021
Finalist, Student Honors Paper Competition, Geographic Information Science and Systems Specialty Group, The Annual Meeting of the American Association of Geographers, Virtual.	2021
First place, Graduate Student Research Competition, Texas GIS Day 2020, Virtual.	2020
Second place, The Optimized Locations for Bicycle Sharing System in the City of Goyang, South Korea, Korea Land & Housing Corporation	2020

First place, Paper Competition, GIS Day 2019, Texas A&M University.	2019
First place, Summer School Group Competition, American Association of Geographers - University Consortium for Geographic Information Science (AAG-UCGIS) Summer School 2019 at University of Illinois at Urbana-Champaign.	2019
Student leadership award, Korean-American Association for Geospatial and Environmental Sciences.	2019
Second place, Graduate Geoscience Oral Presentation, 22 nd Annual Student Research Week, Texas A&M University.	2019
First place, Outstanding Paper Award, The 10 th China-Japan-Korea Joint Conference & 1 st Asian Conference on Geography.	2015
Bronze medal, Seoul Institute Thesis Competition, The Seoul Institute.	2015
First place, Student Poster Competition, Annual Meeting of Korean Geographers.	2014
Bronze medal, Student Poster Competition, Annual Meeting of the Korean Geographical Society.	2010

PUBLICATIONS & PRESENTATIONS

Journal Articles

- [9] **Park, J.**, & Goldberg, D. W. (Accepted). An examination of the stochastic distribution of spatial accessibility to intensive care unit (ICU) beds during the coronavirus pandemic: a case study of the Greater Houston area of Texas. *Geographical Analysis*.
- [8] **Park, J.**, Kang, J.-Y., Goldberg, D. W., & Hammond, T. A. (2022). Leveraging temporal changes of spatial accessibility measurements for better policy implications: a case study of electric vehicle (EV) charging stations in Seoul, South Korea. *International Journal of Geographical Information Science*, 36(6), 1185–1204. <https://doi.org/10.1080/13658816.2021.1978450>
- [7] **Park, J.**, & Goldberg, D. W. (2021). A review of recent spatial accessibility studies that benefitted from advanced geospatial information: Multimodal transportation and spatiotemporal disaggregation. *ISPRS International Journal of Geo-Information*, 10(8). <https://doi.org/10.3390/ijgi10080532>
- [6] Kang, J.-Y., & **Park, J.** (2021). Measuring spatial accessibility to COVID-19 testing sites: A case study of Seoul. *Journal of the Korean Geographical Society*, 56(2), 231–244. <https://doi.org/10.22776/kgs.2021.56.2.231>
- [5] **Park, J.**, Choi, M., & Kang, J.-Y. (2021). Spatial optimization of indoor sports stadium seats under social distancing practice during the COVID-19 pandemic. *Journal of the Korean Geographical Society*, 56(1), 53–66. <https://doi.org/10.22776/kgs.2021.56.1.53>
- [4] **Park, J.**, Goldberg, D. W., & Hammond, T. (2020). A comparison of network model creation algorithms based on the quality of wayfinding results. *Transactions in GIS*, 24(3), 602–622. <https://doi.org/10.1111/tgis.12632>
- [3] **Park, J.**, Park, J., & Choi, J. (2018). An air pollution exposure on floating population using air pollution dispersion model. *The Geographical Journal of Korea*, 52(2), 193–204.
- [2] Do, M. S., Lee, J., Jang, H., Kim, D., **Park, J.**, & Yoo, J. (2017). Spatial distribution patterns and prediction of hotspot area for endangered herpetofauna species in Korea. *Korean Journal of Environment and Ecology*, 31(4), 381–396.
- [1] **Park, J.**, Choi, J., & Hong, S. Y. (2016). Comparison between the road-based and the parcel-based address coordinates for urban air pollution estimation - A case study of Yeongdeungpo-gu, Seoul, Korea. *Journal of Cadastre & Land InformatiX*, 46(2), 169–181.

Conference Proceedings

- [1] Lee, K., **Park, J.**, & Choi, J. (2015). A comparison of image aligning and correcting software with an unmanned aerial system. *Free and Open Source Software for Geospatial (FOSS4G) Conference Proceedings*, (1), 48.

Oral Presentations

- [13] **Park, J.**, & Goldberg, D. W. (2021, June 7–9). *Measuring spatial accessibility to ICU beds under the uncertainty of supply and mobility*. University Consortium for Geographic Information Science (UCGIS) Symposium 2021, Virtual. Honorable Mention at Paper Awards.
- [12] **Park, J.**, Kang, J.-Y., & Goldberg, D. W. (2021, April 7–11). *Examining 24-hour fluctuation of spatial accessibility from temporal dynamics in supply, demand, and mobility: A case study of electric vehicle (EV) charging stations in southeast Seoul, the Republic of Korea*. The Annual Meeting of the American Association of Geographers, Virtual. A finalist at AAG-GISS SG Student Honors Paper Competition.
- [11] **Park, J.** (2020, November 16–18). *Spatiotemporal dynamics of accessibility: A case study of electric vehicle (EV) charging stations in southeast Seoul, South Korea*. Texas GIS Day 2020, Virtual. Awarded 1st place.
- [10] **Park, J.**, Kang, J.-Y., & Goldberg, D. W. (2020, November 13). *The importance of temporal dynamics for enhancing the accuracy of the spatial accessibility measurement: a case study of EV charging stations in Seoul, South Korea*. the Annual meeting of the Korean Geographical Society, Virtual.
- [9] **Park, J.**, Goldberg, D. W., & Hammond, T. (2020, July 13–16). *Comparisons of network generation algorithms by automated extraction from BIMs*. Esri User Conference, Virtual.
- [8] **Park, J.** (2019, November 12). *Comparisons of network generation algorithms by automated extraction from Building Information Modeling*. Texas A&M University GIS Day 2019, College Station, Texas, USA. Awarded 1st place.
- [7] **Park, J.**, Yin, Z., & Goldberg, D. W. (2019, April 2–7). *An automated indoor network extraction from Building Information Modeling*. The Annual Meeting of the American Association of Geographers, Washington, DC, USA.
- [6] **Park, J.** (2019, March 18–22). *An automated indoor network extraction from Building Information Modeling*. The 22nd Annual Student Research Week, Texas A&M University, College Station, TX, USA. Awarded 2nd place in the Graduate Geoscience Oral Presentation.
- [5] **Park, J.**, & Goldberg, D. W. (2019, March 5–8). *An automated indoor network extraction from building information modeling*. 2019 Esri Developer Summit, Palm Springs, CA, USA.
- [4] **Park, J.** (2017, October 25–28). *Korea's environmental issues and the national atlas of Korea vol. II*. The Annual Meeting of the Southwest Division of the American Association of Geographers, Huntsville, TX, USA.
- [3] **Park, J.**, & Choi, J. (2016, March 29–April 2). *Comparison of address locations during the address system transition in Korea*. The Annual Meeting of the American Association of Geographers, San Francisco, CA, USA.
- [2] **Park, J.**, Park, J., & Choi, J. (2015, October 9–12). *Estimation of actual exposure to air pollution for floating population*. The 10th China-Japan-Korea Joint Conference & 1st Asian Conference on Geography, Shanghai, China. Awarded the Winner of Outstanding Paper Award.
- [1] **Park, J.**, Choi, D., Na, Y. G., Lee, B., & Choi, J. (2014, July 6–9). *Comparison of road name address and parcel-based address for line source air pollution dispersion*. The 9th Korea-China-Japan Joint Conference on Geography, Busan, Korea.

Poster Presentations

- [5] **Park, J.**, Goldberg, D. W., Lybrand, B., & Meador, J. (2018, April 10–14). *3D visualization of CAD Data for an evacuation plan*. The Annual Meeting of the American Association of Geographers, New Orleans, LA, USA.
- [4] Choi, J., & **Park, J.** (2016, March 29–April 2). *Correlation between air pollution dispersion and floating population*. The Annual Meeting of the American Association of Geographers, San Francisco, CA, USA.
- [3] Choi, J., **Park, J.**, & Lee, K. (2015, April 21–25). *Importance of road name address for line source air pollution dispersion*. The Annual Meeting of the American Association of Geographers, Chicago, IL, USA.
- [2] **Park, J.**, Choi, D., & Park, W. (2014, June 20–21). *The validity of new geocoding system using line source air pollution dispersion model*. The Annual Meeting of the Korean Geographers, Seoul, Korea.
- [1] **Park, J.** (2010, May 27–28). *A spatial analysis of the shopping district in front of the Kyung Hee University*. The Annual Meeting of the Korean Geographers, Seoul, Korea.

Invited Panelists, Presentations, & Workshops

- [10] Lecture. (2022, April 12). *Introduction to Python Programming*. UIUC GEOG380: GIS II Spatial Prob Solving.
- [9] Lecture. (2022, April 1). *Advancing Spatial Accessibility Measurements to Urban Infrastructure: Uncovering Temporal Dynamics and Uncertainty*. KAGES-KHU Bridging Network Seminar.
- [8] Presentation. (2021, November 16). *Campus Operations GIS*. Texas GIS Day 2021.
- [7] Presentation. (2021, July 12). *Measuring spatial accessibility to intensive care unit (ICU) beds under the uncertainty of supply and mobility*. AAG Geospatial Fellows Webinar Series. Virtual.
- [6] Presentation. (2021, April 9). *The domain expansion of spatial accessibility*. Young Korean Geographers Forum II, Korean-American Association for Geospatial and Environmental Sciences. Virtual.
- [5] Lecture. (2020, November 18). *Efficient infrastructure placements with spatial analysis*. Department of Geography Education, Kongju National University, South Korea.
- [4] Workshops. (2019, July 26). *Automated indoor network extraction from Building Information Modeling*. 2019 KHU-UWG Geo-Spatial Workshop. Carrollton, GA, USA.
- [3] Presentation. (2019, April 4). *An approach about interoperability between Geographic Information Science and Building Information Modeling*. Young Korean Geographers Forum I, Korean-American Association for Geospatial and Environmental Sciences. Washington, DC, USA.
- [2] Presentation. (2018, November 11). *3D Aggeland*. Texas A&M University GIS Day 2018, College Station, Texas, USA.
- [1] Workshop. (2018, November 11). *Hands-on 3D mapping*. Texas A&M University GIS Day 2018, College Station, Texas, USA.

FUNDS & GRANTS

Geospatial Software Institute of University of Illinois at Urbana-Champaign	2020
Geospatial Fellows for Advancing COVID-19 Research & Education, CO-PI with Dr. Daniel W. Goldberg (PI, Advisor)	USD 4,200
Texas A&M University, Department of Geography	
Travel Awards (2020)	USD 650
Travel Awards (2019)	USD 700
Travel Awards (2018)	USD 500
Korean-American Association for Geospatial and Environmental Sciences	2019
Sim Travel Award	USD 333

The Korean Geographical Society	2016
International Conference Travel Awards	KRW 500,000
Kyung Hee University	
Graduate Student Travel Awards (2015)	KRW 1,400,000
Graduate Student Travel Awards (2014)	KRW 1,400,000

TEACHING EXPERIENCE

University of Illinois at Urbana-Champaign (Instructor)	
GEOG489: Programming for GIS (Teachers Ranked as Excellent)	Spring 2022
Texas A&M University (Teaching Assistant)	
GEOG361: Remote Sensing in Geoscience	Fall 2017

PROFESSIONAL SERVICES

Cyber Infrastructure Specialty Group (CISG), American Association of Geographers	
Director	2021–2023
Student Director	2020–2021
Korean American Scientists and Engineers Association at Texas A&M University	2017–2019
Treasurer	
Korea-America Association for Geospatial and Environmental Sciences	2018–2019
Student Board Member	
Texas A&M University Association of Geography Graduate Student	2018–2019
Vice Chief Student Leader (Executive Committee)	
Association of the Korean Geographers	2015–2016
Annual Meeting Coordinator	

PROFESSIONAL SOCIETY MEMBERSHIPS

Association of American Geographers (AAG)

University Consortium for Geographic Information Science (UCGIS)

Asian Geographical Association (AGA)

Korean-American Scientists and Engineers Association (KSEA)

Korea-America Association for Geospatial and Environmental Sciences (KAGES)

The Korean Geographical Society (KGS)

CERTIFICATE & TECHNICAL SKILLS

Certification on Engineer Surveying Geo-Spatial Information

Strong Skill with GIS/RS Software: ArcMap, ArcGIS Pro, ArcGIS Enterprise, QGIS, ENVI, ERDAS

Strong Skill in Programming Languages: Python, R

Strong Skill in BIM Software: Autodesk Revit

Moderate Skill in Handling Database: MS SQL Server