Yujin Park

Department of City Planning and Real Estate Development
College of Architecture, Arts, and Humanities
Clemson University

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Academic Appointments

Clemson University — Clemson, SC
Assistant Professor of City and Regional Planning — August 2020 -
Faculty Affiliate, Ph.D. in Planning, Design, and the Built Environment
College of Architecture, Arts, and Humanities

Education

Ph.D in City and Regional Planning, The Ohio State University, Columbus, OH — August 2020
· Dissertation: *Essays in Geospatial Modeling of Urban Green Infrastructure*
M.C.P Master of City Planning, Seoul National University, Seoul, South Korea — February 2014
B.A. in Humanities, Seoul National University, Seoul, South Korea — February 2012

Research Interests

Sustainable Land-Use Planning, Urban Green Infrastructure, Urban Forestry
Planning for Environmentally Adaptive, Just, and Energy-Efficient Neighborhoods
Sustainable Mobility, Active Travel, Vehicle Sharing
Geospatial Analytics, 3D GIS, Remote Sensing, Statistical Learning

Peer-reviewed Publications

Park, Y. and Guldmann, J-M. (2020) "Understanding Disparities in Community Green Accessibility Under Alternative Green Measures: A Metropolitan-Wide Analysis of Columbus, Ohio, and Atlanta, Georgia." *Landscape and Urban Planning*, 200, pp.103806. Doi:10.1016/j.landurbplan.2020.103806

Park, Y. and Guldmann, J-M. (2020) "Measuring Continuous Landscape Patterns with Gray-Level Co-Occurrence Matrix (GLCM) Indices: An Alternative to Patch Metrics?" *Ecological Indicators*, 109, pp.105802. Doi:10.1016/j.ecolind.2019.105802

Kim, D., **Park, Y.** and Ko, J. (2019) "Factors Underlying Vehicle Ownership Reduction Among Carsharing Users: A Repeated Cross-Sectional Analysis." *Transportation Research Part D: Transport and Environment,* 76, pp.123-137. Doi:10.1016/j.trd.2019.09.018

Park, Y. and Guldmann, J-M. (2019) "Creating 3D City Models with Building Footprints and LiDAR Point Cloud Classification: A Machine Learning Approach." *Computers, Environment and Urban Systems,* 75, pp.76-89. Doi:10.1016/j.compenvurbsys.2019.01.004

Park, Y. and Akar, G. (2019) "Why Do Bicyclists Take Detours? A Multilevel Regression Model Using Smartphone GPS Data." *Journal of Transport Geography*, 74, pp.191-200. Doi:10.1016/j.jtrangeo.2018.11.013

Park, Y. and Akar, G. (2019) "Understanding the Effects of Individual Attitudes, Perceptions, and Residential Neighborhood Types on University Commuters' Bicycling Decisions." *Journal of Transport and Land Use*, 12(1), pp.419-441. Doi:10.5198/jtlu.2019.1259

Park, Y., Chen, N., and Akar, G. (2018) "Who is Interested in Carpooling and Why: The Importance of Individual Characteristics, Role Preferences and Carpool Markets." *Transportation Research Record: Journal of the Transportation Research Board*, 2672(8), pp.708-718. Doi:10.1177/0361198118756883

Kim, D., Ko, J., and **Park, Y.** (2015) "Factors Affecting Electric Vehicle Sharing Program Participants' Attitudes about Car Ownership and Program Participation." *Transportation Research Part D: Transport and Environment*, 36, pp.96-106. Doi:10.1016/j.trd.2015.02.009

Reports and Edited Articles

Park, Y. and Guldmann, J-M. (2018) "Land-Use Optimization on the Basis of Microclimatic Analysis." *Planning and Policy*, Korea Research Institute for Human Settlements, vol.439, pp.49-61.

Park, Y. and Akar, G. (2017) "Investigating Bicyclists' Route Preferences and Detour Behavior with Smartphone GPS Application, Remote Sensing, and Google Street View." *Planning and Technology Today,* Winter 2017, American Planning Association (APA) Technology Division.

Akar, G. and **Park, Y.** (2017) "Tracking Bicyclists' Route Choices, Case Study: The Ohio State University." US Department of Transportation, Region V Regional University Transportation Center Final Report.

Manuscripts in Preparation

Park, Y., Guldmann, J-M., and Liu, D. "A 3D Digital City Approach to Assessing the Role of Urban Shade Morphology in Microclimatic Moderation." (*Scheduled submission in Summer 2020*)

Park, Y. and Guldmann, J-M. "The Impacts of Tree and Building Shades in Neighborhood Thermal Control: A 3D Digital City Simulation Approach." (*Scheduled submission in Summer 2020*)

Presentations at Professional Meetings

Park, Y. (2020) "The Role of Tree and Building Shades in Neighborhood Thermal Control: A Three-Dimensional Digital City Approach." *2020 Edwards F. Hayes Graduate Research Forum*, Oral Presentation in Social and Behavioral Sciences, The Ohio State University, Columbus, OH.

Park, Y., Guldmann, J-M. (2019) "A Three-Dimensional Digital City Approach to Assess the Role of Urban Shades in Microclimatic Moderation." *Association of Collegiate Schools of Planning (ACSP) 59th Annual Conference*, Greenville, SC.

Park, Y. (2019) "Creating 3D City Models with Building Footprints and LiDAR Point Cloud Classification: A Machine Learning Approach." *2019 Edwards F. Hayes Graduate Research Forum*, Oral Presentation in Engineering, The Ohio State University, Columbus, OH.

Park, Y., Guldmann, J-M. (2018) "Creating 3D City Models with Building Footprints and LiDAR Point Cloud Classification: A Machine Learning Approach." *Graduate Quantitative Skills Workshop*, Department of City and Regional Planning, Gazi University, Ankara, Turkey.

Park, Y., Guldmann, J-M. (2018) "The Green Morphology of Neighborhoods and Disparities in Green Space Accessibility: A Comparative Analysis of Columbus and Atlanta Metropolitan Areas." *Association of Collegiate Schools of Planning (ACSP) 58th Annual Conference*, Buffalo, NY.

Park, Y., Chen, N. and Akar, G. (2018) "Who Is Interested in Carpooling and Why? The Importance of Individual Characteristics, Role Preferences, and Carpool Markets", *97th Annual Meeting of the Transportation Research Board (TRB)*, Washington, D.C.

Park, Y. and Akar, G. (2017) "Bicycle Route Preference of University Commuters Revealed by Smartphone GPS Data: Safe, Separated, Fluid, and Green." *Association of Collegiate Schools of Planning (ACSP) 57th Annual Conference*, Denver, CO.

Park, Y. and Akar, G. (2017) "The Decision to Commute by Bicycle: The Interplay of Individual Attitudes and Neighborhood Environments." *96th Annual Meeting of the Transportation Research Board (TRB)*, Washington, D.C.

Media Coverage

The Columbus Dispatch (July 12, 2019), Mark Ferenchik, "On Two Wheels: More Bike Trails Would Encourage Cycling Commutes." References the 2019 published article with Gulsah Akar. Available at: https://www.dispatch.com/news/20190712/ohio-state-study-more-bike-trails-would-encourage-cycling-commutes

Science X Network (June 26, 2019), Laura Arenschield, "To Increase Bike Commuters, Look to Neighborhoods." References the 2019 published article with Gulsah Akar. Available at: https://phys.org/news/2019-06-bike-commuters-neighborhoods.html

GIS Lounge (September 3, 2019), Mark Altaweel, "Finding Pleasant Routes Using GIS." References the 2019 published article with Gulsah Akar. Available at: https://www.gislounge.com/finding-pleasant-routes-using-gis

Awards and Fellowships

1st Prize Winner (2020), Edward F. Hayes Graduate Research Forum, The Ohio State University.
Oral Presentation in the Social and Behavioral Sciences Section for Campus-Wide Competition.

Presidential Fellowship (2019), The Graduate School, The Ohio State University.
"The most prestigious award given by the Graduate School. Recipients embody the highest standards of scholarship in the full range of Ohio State's graduate programs". 12-month stipend + tuition waiver.

Career Development Grant (2019), Council of Graduate Students, The Ohio State University.

KSEA-KUSCO Graduate Scholarship (2019), Korean American Scientists and Engineers Association (KSEA) and Korea-US Science Cooperation Center (KUSCO), Vienna, VA.

Jerrold R. Voss Scholarship (2019), Best PhD Dissertation Proposal, Knowlton School of Architecture, The Ohio State University.

Helene M. Overly Memorial Scholarship (2018), Women's Transportation Seminar (WTS), Columbus Chapter, Columbus, OH

KOTAA Excellent Student Paper Award (2017), Korean Transportation Association in America with Korean American Scientists and Engineers Association, Washington, D.C.

Conference Travel Grant (2016), Center for Urban and Regional Analysis, The Ohio State University.

Master's Thesis with Highest Honors (2014), Graduate School of Environmental Studies (GSES), Seoul National University, Seoul, South Korea.

Graduate Student Best Paper Award (1st place) (2013), The Korean Planners Association (KPA) Annual Conference, Seoul, South Korea.

Excellent Dream Scholarship (2011), Korea National Student Aid Foundation, Seoul, South Korea
Full Tuition and Allowance for a Full Academic Year for Academic Excellence

Work Experience

Managing Editor, Journal of Planning Literature (JPL) (SSCI, 5-Year IF: 4.11) 2017 - 2020
· Oversee the Production of the Journal
· Assist the Editor in Managing the Review of Academic Manuscripts in the Field of Urban Planning
· JPL ranks 16th out of 40 in the Urban Studies category (2019 JCR Release)

Research Fellow, Korea Rural Economic Institute (KREI), Seoul, South Korea 2014 - 2015
· Department of Rural and Exurban Planning Policy
· Analyze Public Service Accessibility, Long-Term Demographic and Land-Use Changes in Declining Exurbs

Section Head Assistant, City and Regional Planning, The Ohio State University 2017 - 2019
· Head: Rachel G. Kleit / Maria M. Conroy
· Prepare Public Information Documents and Annual Reports for Accreditation of the Program
· Organize Graduate Research Seminars; Facilitate Course Advertisement

Select Research Projects

Long-Term Microclimate Changes in the Columbus Metropolitan Area 2019
· Funded by Emeritus Academy, The Ohio State University
· Research Associate (PI: Jean-Michel Guldmann)

Tracking Bicyclists' Route Choices - Case Study: The Ohio State University 2016 - 2017
· Funded by US Department of Transportation NEXTRANS Center for Region V Program
· Research Associate (PI: Gulsah Akar)

Bicycle Level Of Service of the Shortest Routes to The Ohio State University 2015 - 2016
· Funded by US Department of Transportation NEXTRANS Center for Region V Program
· Research Associate (PI: Gulsah Akar)

Annual Assessment of Public Service Accessibility and Quality of Life in Exurban and Rural Areas 2014 - 2015
· Conducted at Korea Rural Economic Institute, Seoul, South Korea
· Research Fellow (PI: Gwangsun Kim)

Decision Support Systems for Sustainable Land Use at the Rural-Urban Fringe 2014 - 2015
· Conducted at Korea Rural Economic Institute, Seoul, South Korea
· Research Fellow (PI: Jaheon Sim)

The Role of National Geospatial Data for Climage Change Adaptation Planning 2013
· Funded by Korea Land and Geospatial Information Corporation, Seoul, South Korea
· Research Assistant (PI: Heeyeon Lee)

Regional Assessment of Forest Resources and Environmental Services for the Development of Korean Forest Carbon Offset Scheme 2013
· Funded by Korea Forest Service, Seoul, South Korea
· GIS Assistant (PI: Jaheon Sim)

Teaching

Instructor of Record, Clemson University
CRP 8040 Introduction to GIS for Planning and Policy Fall 2020 (Expected)
CRP 8041 Introduction to GIS for Planning and Policy Laboratory Fall 2020 (Expected)

Teaching Associate, The Ohio State University
CRPLAN 3200 Place Making (Instructor: Jesus Lara) Fall 2016

Teaching Trainee, The Ohio State University
CATME Faculty Workshop, College of Engineering Fall 2019
FABENG 7220: College Teaching in Engineering, College of Engineering Spring 2020
· Teaching fellow preparatory training courses

Article Referee Service

Ecological Indicators (Elsevier, SCI, IF: 4.49)
Journal of Transport Geography (Elsevier, SSCI, IF: 3.56)
Transportation Research Record: Journal of the Transportation Research Board (SAGE, SCI, IF: 0.75)

Technical Skills and Methods

Language	Python (Libraries: NumPy, SciPy, Pandas, Geopandas, GDAL, Shapely, Scikit-Learn, Rasterio, LasPy, PySAL, PyProj, PyGeoprocessing, Matplotlib, etc.), R (Proficient at Geospatial Processing and Statistical Computing), MATLAB, CityGML
Analysis	ArcGIS, ArcGIS Pro, CityEngine, ERDAS Imagine, SPSS, STATA, SAS, FRAGSTATS, GeoDa, MGWR
Tools	Google Earth Engine, Earth Explorer, Feature Analyst, SketchUp, Adobe Photoshop
Visualization	Tableau, Plotly, Datawrapper
Methods	2D/3D Geospatial Modeling, Econometrics, Spatial Statistics, Machine Learning, Choice Modeling, Multilevel Modeling, Optimization
Data	Image Data (Remote Sensing, Aerial Photos, Google Street View), GPS Tracking Data, 3D Data (LiDAR, DEM), GIS Vector/Raster Data, Network Data, Text Data, Panel/Longitudinal/Cross-Sectional (Survey) Data

Updated May 2020