JAEHEE PARK

Visiting Assistant Professor
Department of Geographic Information Science, University of Redlands
1200 E Colton Ave, Redlands, CA 92373
(619) 684-0306

jpark1200@sdsu.edu | j_park@ucsb.edu | linkedin.com/in/jaehee-park06

Education

Ph.D. in Geography

Sep 2024

San Diego State University and UC Santa Barbara

- Dissertation: The Role of Big Data in Understanding Urban Dynamics: Social Sensing, Mobility Patterns, and Place Connectivity during the COVID-19 Pandemic
- Committee: Ming-Hsiang Tsou (Chair), Atsushi Nara, Somayeh Dodge, Susan Cassels

M.A. in Geography

Aug 2013

Ewha Womans University, Seoul, Korea

Thesis: A study on the Applicability of SNS Data for the Urban Policy Indicator: Tweet data on the Spatial Characteristics of the Residential Environment Satisfaction

B.A. in Geography Education & Social Studies

Ewha Womans University, Department of Social Studies

Aug 2011

Ewha Womans University, Seoul, Korea

Exchange student at The Education University of Hong Kong (Sep 2009 - May 2010)

Research Interest

Spatial Data Science, Big Data and Social Media Analytics, Social Sensing, Social Network Analysis, Human Mobility, Urban Analytics, Smart City, Health Disparity and Social determinants of health (SDOH)

Work Experience

Visiting Assistant Professor University of Redlands, Department of Geographic Information Scien	Aug 2025 - Current ace
Lecturer San Diego State University, Department of Geography	Aug 2024 to Jul 2025
Teaching Assistant San Diego State University	Aug 2020 to May 2024
Research Assistant San Diego State University	Aug 2017 to May 2023
Assistant Research Fellow Korea Research Institute for Human Settlements (KRIHS), Geospa Center	Aug 2013 to Apr 2016 tial Analytics
Research Assistant	Aug 2011 to Aug 2013

Participation in Research Projects

- Assessing COVID-19 Vaccine Beliefs and Resistance in San Diego County, San Diego State University, Aug 2022 May 2023.
- Integrated Stage-based Evacuation with Social Perception Analysis and Dynamic Population Estimation (NSF-IMEE), San Diego State University, Aug 2017 2022. https://decisionsupport.sdsu.edu/
- Spatiotemporal Modeling of Human Dynamics Across Social Media and Social Networks (NSF-IBSS), San Diego State University, Aug 2017 2018. https://socialmedia.sdsu.edu/
- Geospatial Big Data Analytics for the Diagnosis of Regional Wellbeing In an Era of Decreasing Population (joint research with CSIS, The University of Tokyo), National Research Council for economics, humanities, and social science, 2016
- Developing Grid-based Statistic Maps for Decision Making, Sejong-si, 2015
- National Territorial Development for the Future: Strategies and Tasks for Policy Making, Ministry of Land, Infrastructure, and Transport, 2014
- National Territorial Monitoring using National Territorial Index, National Geographic Information Institute, 2013 & 2015
- Developing a Convergence Model of Welfare & Geospatial using Spatial Big Data, Ministry of Land, Infrastructure, and Transport, 2013
- Strategic Plan for Building of Spatial Decision Support Service based on National Basic Districts, Ministry of Public Administration and Security, 2012
- Research on Geo-web based Mobile Learning, National Research Foundation of Korea, 2012

Scholarly Activities

Journal Publications

- Park, J., Tsou, M. H., Nara, A., Dodge, S., & Cassels, S(2024b). Examining human mobility changes during COVID-19 across socioeconomic groups: a comparative analysis of San Diego County and New York City. *Computational Urban Science*, 4(1), 21. https://doi.org/10.1007/s43762-024-00133-1
- Park, J., Tsou, M. H., Nara, A., Cassels, S., & Dodge, S(2024a). Developing a social sensing index for monitoring place-oriented mental health issues using social media (*Twitter*) data. *Urban Informatics*, 3(2). https://doi.org/10.1007/s44212-023-00033-5
- Tsou M. H., Xu J., Lin C. D., Daniels M., Embury J., **Park, J.**, ... & Gibbons J. (2022). Analyzing Spatial-Temporal Impacts of Neighborhood Socioeconomic Status Variables on COVID-19 Outbreaks as Potential Social Determinants of Health. *Annals of the American Association of Geographers*, 1-22. https://doi.org/10.1080/24694452.2022.2149460
- Kang Y., **Park**, **J.**, & Kang A. (2015). An Analysis on the Spatial Characteristics of Satisfaction on the Residential Environment Using Tweets. *International Journal of Geospatial and Environmental Research*, 1(2), Article 5. https://dc.uwm.edu/ijger/vol1/iss2/5
- Park, J., & Kang Y. (2014). A study on applicability of Twitter data for complementing the urban policy indicators. *Journal of the Korean Urban Geographical Society*, 17(1), 43-56.

Manuscript Submitted to Refereed Journals for Review

• Park, J., Tsou, M. H., Nara, A., Dodge, S., & Cassels, S(Under review). Measuring Place Connectivity Using Human Mobility Networks. *Computers, Environment and Urban Systems*.

Refereed Conference Papers

- Martinez L.S., Park, J., Chen H.L., Mikita E.A., Gonzalez M., Yadav V., Jones E., Tsou M.-H. (June 2024). Psychosocial determinants of three behaviors related to COVID-19 vaccination: Implications for public health communication campaigns. Paper accepted for presentation at the International Communication Association annual meeting, Gold Coast, Australia.
- Park, J., & Tsou M. H. (2020 July). Analyzing Public Discourse on Social Media With A Geographical Context: A Case Study of 2017 Tax Bill. In *International Conference on Social Media and Society* (pp. 14-20). https://doi.org/10.1145/3400806.3400809
- Park, J., Zhang H., Han S. Y., Nara A., & Tsou M. H. (2020). Estimating Hourly Population Distribution Patterns at High Spatiotemporal Resolution in Urban Areas Using Geo-Tagged Tweets and Dasymetric Mapping. In 11th International Conference on Geographic Information Science (GI-Science 2021)-Part I. Schloss Dagstuhl-Leibniz-Zentrum für Informatik. https://doi.org/10.4230/LIPIcs.GIScience.20

Book Chapters

- Tsou M. H., Zhang H., Park, J., Nara A., & Jung C. T. (2021). Spatial Distribution Patterns of Geo-tagged Twitter Data Created by Social Media Bots and Recommended Data Wrangling Procedures. In *Empowering Human Dynamics Research with Social Media and Geospatial Data Analytics* (pp. 257-273). Springer, Cham. https://doi.org/10.1007/978-3-030-83010-6_14
- Nara A., Machiani S. G., Luo N., Ahmadi A., Robinett K., Tominaga K., **Park, J.**, ... & Tsou M. H. (2021). Learning dependence relationships of evacuation decision making factors from Tweets. In *Empowering Human Dynamics Research with Social Media and Geospatial Data Analytics* (pp. 113-138). Springer, Cham. https://doi.org/10.1007/978-3-030-83010-6_7

Presentations

- Park, J. (2025 Mar). Examining Human Mobility Changes During COVID-19 Across Socioeconomic Groups. 2024 AAG Annual meeting, March 23, 2025, Detroit, U.S.
- Park, J. (2023 Mar). Social sensing for mental health. 2023 AAG Annual meeting, March 23, 2023, Denver, U.S.
- Park, J. (2022 Feb). Mapping emotions on social media during the COVID-19 pandemic. 2022 AAG Annual meeting, February 26, 2022, U.S.
- Park, J. (2020 August). Analyzing Public Discourse on Social Media With a Geographical Context: A Case Study of 2017 Tax Bill. #SMSociety 2020 Conference, August 2020
- Park, J. (2019 April). Building a Spatial Social Network of public discourse in Social Media (Twitter). 2019 AAG Annual meeting, April 13, 2019, Washington D.C., U.S.
- Park, J. (2018 April). Analyzing Public Voice in Social Media: A Twitter Case Study of Charlottesville Attack. 2018 AAG Annual meeting, April 13, 2018, New Orleans, U.S.
- Im E., & Park, J. (2015 Dec). Analysis of vulnerability index for community revitalizing project. 1st *International Micro Geo Data Forum* at Center for Spatial Information Science (CSIS), The University of Tokyo, Dec 1, 2015, Tokyo, Japan
- Park, J. (2013 June). Tweeter Data Analysis: Spatial Characteristics of the Residential Environment Satisfaction. 2013 Annual Meeting of the Korean Geography Society, June 22, 2013, Seoul, Korea

Guest Lecture/Invited Talks

 Park, J. (2024 Nov). Thematic Map Design. In TOURS-3025 Spatiotemporal Tourism Big Data Analysis, Kyung Hee University, Nov 4, 2024, Korea

- Park, J. (2024 Mar). Studying Place-effect with Social Media (*Twitter*) and Mobile Phone Data. In BDA-600 Big Data Analytics Capstone Seminar, San Diego State University, Mar 12, 2024, U.S.
- Park, J. (2021 Nov). Geovisualization. In GEOG-104 Geographic Information Science, San Diego State University, Nov 9, 2021, U.S.
- Park, J. (2021 April). Analyzing Social issues with Twitter in the Geographical Context. Korea Cyber University, April 2021, Korea

Government Sponsored Reports

- Developing a Convergence Model of Welfare & Geospatial using Spatial Big Data. Funded by the Korean Ministry of Land, Infrastructure, and Transport.
 - Duties and responsibilities: Developed a keyword list for web scraping; Conducted interviews; Examined welfare improvement needs in Daejeon City using Point of Interest (POI) and online community data analysis.
- National Territorial Development for the Future: Strategies and Tasks for Policy Making. Funded by the Korean Ministry of Land, Infrastructure, and Transport.
 - Duties and responsibilities: Analyzed news articles from 2014-2016; Conducted literature review; Developed a policy proposal list for policymakers; Organized policy discussion meetings; Maintained a website.
- A study on Development of Grid-based Statistic Map for Decision Making. Funded by Sejong City.
 Duties and responsibilities: Analyzed vulnerable areas with CCTV data and the Census data; Created maps based on the results of analysis; Devised prototype applications for policymakers in Sejong City.
- National Territorial Monitoring using National Territorial Index. Funded by National Geographic Information Institute.
 - Duties and responsibilities: Created a statistical yearbook based on National Territorial Indicator; Analyzed vulnerable areas with National Territorial Indicator.
- Facilitating Regional Collaboration for the success of the HOPE Area Project. Funded by the Korean Ministry of Land, Infrastructure, and Transport.
 - Duties and responsibilities: Conducted literature review; Conducted interviews; Case studies on fostering inter-regional collaboration and cooperation.

Teaching and Leadership Experiences

Lecturer $Jul\ 2025-Jul\ 2025$

GEOG-583: Mapping and Distributed GIServices, Big Data Analytics (BDA) Program, San Diego State University Global Campus

- Teach classes

Lecturer Jan 2025 - May 2025

GEOG-104: Geographic Information Sciences and Spatial Reasoning, Department of Geography, San Diego State University

- Teach classes

Lecturer Aug 2024 - Dec 2024

GEOG-381: Computerized Map Design, Department of Geography, San Diego State University

- Teach classes and lab sessions

Teaching Assistant Jan 2024 - Jun 2024 GEOG-583: Internet Mapping and Distributed GIServices, Department of Geography, San Diego State University - Maintain and update lab exercise materials; provide assistance during lab sessions Teaching Assistant Aug 2021 - Dec 2021 GEOG-581: Data Visualization, Department of Geography, San Diego State Uni-- Teach and support lab sessions (JavaScript and P5.js) Teaching Assistant Aug 2020 - Dec 2020 GEOG-584: Methods and Applications of Geographic Information Systems, Department of Geography, San Diego State University - Teach lab sessions (ArcGIS Pro) Lecturer Jan 2017, Feb 2017 "Geospatial information basics and applications", Spatial Information Academy, Korea Land and Geospatial Informatix Corporation Teaching Assistant Jul 2013 - Jan 2012 "Geospatial Web" in the course of National GIS Education for Geography teachers, Department of Social Studies, Ewha Womans University - Support Google Earth API, open data API usage, and geospatial web development Feb 2012 Program Assistant Faculty-led Study Abroad Program, College of Education, Ewha Womans Univer-- "Teaching in America" in exchange program at University of Minnesota Duluth Student Representative of Geography Education 1st semester 2009 Department of Social Studies, Ewha Womans University 2009 Field Trip Group in Geography Education major, Department of Social Studies, Ewha Womans University Resident Assistant Sep 2011 - Apr 2013 Graduate Student Dormitory Office, Ewha Womans University Honors and Awards Annual Best Paper Award - 3rd place Aug 2025 Journal Urban Informatics, the 4th International Conference on Urban Informatics Graduate Student Professional Development Fund Apr 2021 San Diego State University (\$1,000) The Associated Students Graduate Student Travel Scholarship Apr 2020 San Diego State University (\$1,000) The Cotton Bridges Award for GIS Emphasizing Techniques, 2019 May 2019

Department of Geography, San Diego State University (\$500)

Student Success Fee- Graduate Student Travel Fund, 2019 San Diego State University (\$1,000)	Apr 2019
Student Success Fee- Graduate Student Travel Fund, 2018 San Diego State University (\$1,000)	Apr 2018
University Graduate Fellowship, 2017-2018 San Diego State University (\$30,000) *a competitive two-year funding program for excellent graduate students	Aug 2017
Award for excellent staff Korea Research Institute of Human Settlements (KRIHS)	Dec 2015
Academic Excellence Scholarship	1st Semester 2008 & 2011

Ewha Womans University

Service

AAG 2025 Session Co-organizer

Mar 2025

Human Mobility, Vulnerable Population, and Homelessness Studies: Exploring Spatiotemporal Changes, Socio-Environmental Impacts, and GeoAI Applications

Co-organizer and Judge Panel Chair

Oct 2024

Big Data Hackathon for San Diego https://bigdataforsandiego.github.io/

President Aug 2023 – Present

Future for Women Geographers (FWG), Korea-America Association for Geospatial and Environmental Sciences (KAGES)

AAG 2022 Session Co-organizer

Feb 2022

Symposiums on Human Dynamics Research & Geospatial Health Research: Human Mobility and Urban Dynamics in the COVID-19 Pandemic Era

AAG 2021 Session Co-organizer

Apr 2021

Mapping and Analyzing the Impacts of COVID-19 Outbreak in Neighborhoods

Public Relation Aug 2021 - Jul 2022

Future for Women Geographers (FWG), Korea-America Association for Geospatial and Environmental Sciences (KAGES)

Ph.D. Student Representative

Aug 2020 - Jul 2021

Department of Geography, San Diego State University

San Diego County COVID-19 Dashboard - Developer

Mar 2020 - Apr 2020

Contributed to creating and implementing the San Diego County COVID-19 Dashboard, in partnership with HDMA at SDSU and the County of San Diego Health and Human Services Agency, supporting public health tracking and response. https://disasters.amerigeoss.org/apps/SDSUGeo::sd-covid19-dashboard-1/explore

Geography Graduate Student Association Executive officer – Academic Events & Outreach Team Aug~2020-Jul~2021

Department of Geography, San Diego State University

Computer Skills

• GIS: ArcGIS Pro, ArcGIS Online, QGIS

• Programming Languages: Python, R, JavaScript

• Database: PostgreSQL, MongoDB

• Statistical Analysis: R, SPSS

Certificates

- Geospatial Educator (GeoEdC), National Geospatial Technology Center of Excellence, August 1, 2025
- Graduate Certification in College Teaching, Center for Teaching and Learning at San Diego State University, August 31, 2023
- Teacher's Certificate: The Secondary School Teacher (Grade II) of Geography & Social Studies, Ministry of Education, Science & Technology, 2011

Prepared Courses for Teaching

- $\bullet\,$ GEOG 104 Geographic Information Science and Spatial Reasoning
- $\bullet~$ GEOG 381 Computerized Map Design
- \bullet GEOG 583 Internet Mapping and Distributed GIServices
- $\bullet\,$ GEOG 584 Methods and Applications of Geographic Information Systems
- $\bullet\,$ GEOG 594 Big Data Science and Analytics Platforms