

Pyung Kim

Postdoctoral Scholar
 Center for Spatial Studies and Data Science
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ACADEMIC APPOINTMENTS

Postdoctoral Scholar	Jan 2026 –
<i>Center for Spatial Studies and Data Science, University of California, Santa Barbara</i>	
Graduate Researcher	2024 – 2025
<i>Spatial Health AI Research Partnership (SHARP), The University of Texas at Dallas</i>	
Adjunct Lecturer (Summer/Winter Methodology Workshops)	2023 – 2025
<i>Korea Social Science Data Archive (KOSSDA), Seoul National University</i>	
Research Assistant	2020
<i>Korea Institute of Public Administration (KIPA), National Research Council for Economics, Humanities and Social Sciences</i>	

EDUCATION

Ph.D. in Public Policy and Political Economy	2025
<i>The University of Texas at Dallas</i> (Brian J.L. Berry Scholarship, Highest Honor)	
M.S. in Geospatial Information Science	2025
<i>The University of Texas at Dallas</i>	
M.A. in Public Administration	2020
<i>Yonsei University</i> (Brain Korea 21 PLUS Scholarship, National Research Foundation)	
B.A. in Public Administration	2018
<i>Ajou University</i> (National Excellence Scholarship, Deputy Prime Minister of Korea)	
Exchange Student	2016 – 2017
<i>Julius-Maximilian University of Würzburg</i> , Germany	

RESEARCH AREAS

Substantive	Health Policy, Health Geography, Disability, Neighborhood Effects, Social Capital
Methodological	GIS, Spatial Data Science, Causal Inference, Quasi-experiment, Machine Learning

PUBLICATIONS * Corresponding author; [†] Student co-author

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4. **Kim, P.**, Choi, S. [†], Kim, D., & Lee, C*. (Forthcoming). “Bayesian spatio-temporal modeling for policy evaluation: Sensitivity of policy effect estimates in the context of COVID-19 stay-at-home orders.” *PLOS One*. ([Available at SSRN](#))
 3. **Kim, P.** ^{*}, Kim D., Scotch R., Jeong D. [†], & Kowalske K. (2025). “Geospatial analysis of community-level social and environmental barriers for adult burn injury survivors in North Texas.” *Burns*, 51(5), 107512.
 2. Hong, S. ^{*}, Jeong, D. [†], & **Kim, P.** (2024). “Have offender demographics changed since the COVID-19 Pandemic? Evidence from money mules in South Korea.” *Journal of Criminal Justice*, 91, 102156.
 1. **Kim, P.** & Bae, H. ^{*} (2022). “Do firms respond differently to the carbon pricing by industrial sector? How and why? A comparison between manufacturing and electricity generation sectors using firm-level panel data in Korea.” *Energy Policy*, 162, 112773

UNDER REVIEW

Kim, P. ^{*} “From Command-and-Control to Carbon Pricing: Estimating the Causal Effects on Firm Environmental Performance” ([Available at SSRN](#))

Kim, H. [†], **Kim, P.** ^{*}, “Modeling Policy Diffusion Across Space and Time: A Bayesian Spatial–Temporal Approach”

Kim, P. ^{*}, Hahm, H. [†], Kim, D. & Kowalske, K., “Individual and County-Level Factors Shaping Community Reintegration Among Burn Survivors: An Exploratory Machine Learning Approach”

Kim, P., Jung, J. [†], Min, C., Choi, H., Kim., D, Kumar, P. [†], Hwang, J., & Song, D*. “mHealth Intervention Integrating Personal PM2.5 Monitoring and Deep Learning to Reduce Pediatric Asthma Exacerbations: A Pilot Study”

WORKING PAPERS

“Geospatial Analysis on Dental Health Service Access and Workforce Distribution in Kenya” (with Brenda Okumu, Caroline Kibosia, Dohyeong Kim, Arthur Kemoli, Osman Adullahi, & Hyewon Lee)

“The Impact of Medicaid Expansion on Cancer Outcomes: Evidence on the Moderating Role of Oncology Care Access” (with Kristine Hahm)

“Long-Term Effects of Neighborhoods on Educational Attainment by Disability Status” (sole author)

EXTRAMURAL GRANTS

[Ongoing]

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| 5. Interventional Study to Prevent Exacerbation of Atopic Dermatitis by Exposure to Particulate Matter | 2024 – 2027 |
| <ul style="list-style-type: none">• Role: Data Scientist• PI: Kangmo Ahn, <i>Samsung Medical Center</i>• <i>Korea Disease Control and Prevention Agency</i> (\$629,630) | |
| 4. <u>Geospatial Community Mapping to Assess Social and Environmental Barriers and Facilitators for Burn Survivors</u> | 2022 – 2026 |
| <ul style="list-style-type: none">• Role: GIS Specialist• PI: Karen Kowalske, <i>UTSW Medical Center</i>; co-PI: Dohyeong Kim & Richard Scotch, <i>UTD</i>• <i>National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR)</i>; \$2,320,495) | |
| 3. The Capacity-Building Project for Primary Healthcare Workforce to Improve Maternal and Child Oral Health in Kilifi County, Kenya | 2025 – 2026 |
| <ul style="list-style-type: none">• Role: GIS Specialist (field study in Kenya, October 2025)• PI: Hyewon Lee, <i>Seoul National University</i>• <i>Korea International Cooperation Agency</i> (\$440,000) | |
| 2. <u>What Is the Relationship Between Adolescent Neighborhood Environments and Long-Run Labor Market Outcomes for Children with Disabilities?</u> | 2024 – 2025 |
| <ul style="list-style-type: none">• PI: Pyung Kim, UTD• <i>Social Security Administration via Retirement and Disability Research Center at UW-Madison</i> (\$6,000) | |
| 1. Spatial Distribution of Natural Radiation in Jeonnam Province | 2024 – 2025 |
| <ul style="list-style-type: none">• Role: GIS Specialist• PI: Yeol Rho, <i>Chonnam National Univ.</i>; co-PI: Dohyeong Kim, <i>UTD</i>• <i>National Institute of Environmental Research of Korea</i> (\$160,000) | |

[Completed]

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| 5. Spatial Distribution of Natural Radiation in Jeonbuk Province | 2023 – 2024 |
| <ul style="list-style-type: none">• Role: GIS Specialist• PI: Yeol Rho, <i>Chonnam National Univ.</i>; co-PI: Dohyeong Kim, <i>UTD</i>• <i>National Institute of Environmental Research of Korea (\$160,000)</i> | |
| 4. A Study on International Standards of Software Safety Assessment and Legal Arrangement of Domestic and Foreign Countries | 2020 |
| <ul style="list-style-type: none">• Role: Research Assistant• PI: Hyunsuk Ryu, <i>Korea Institute of Public Administration</i>• <i>Korea Software Policy & Research Institute</i> | |

3. An Analysis of the Local Government Social Welfare Budget	2018
<ul style="list-style-type: none"> • Role: Research Assistant • PI: Jaejin Yang, <i>Yonsei University</i> • <i>Korea Ministry of Health and Welfare</i> 	
2. Analysis of National Distrust Structure of Nuclear Safety Regulations and Development of Risk Communication Strategies for Recovering Trust	2015 – 2016
<ul style="list-style-type: none"> • Role: Research Assistant • PI: Seoyong Kim, <i>Ajou University</i> • <i>Korea Foundation of Nuclear Safety</i> 	
1. Track and Analyze the Performance of Technological Development Project for Original Research	2015
<ul style="list-style-type: none"> • Role: Research Assistant • PI: Seoyong Kim, <i>Ajou University</i> • <i>National Research Foundation of Korea</i> 	

AWARDS AND HONORS

External Awards

Public Administration Research Conference Travel Award, <i>University of Central Florida</i>	2025
<u>JSIT Research Grant</u> , <i>Social Security Administration via UW-Madison</i>	2024
<u>Junior Scholar Intensive Training (JSIT)</u> , <i>Social Security Administration via UW-Madison</i>	2024
President Travel Award for APPAM, <i>Korean Association for Policy Studies</i>	2023
Brain Korea 21 PLUS Scholarship, <i>National Research Foundation</i>	2018 – 2020
The Next Century Humanities Scholarship (National Excellence Scholarship), <i>awarded by the Deputy Prime Minister; funded by the Korea Student Aid Foundation</i>	2015 – 2018

Internal Awards

<u>GIS Pioneer Research Grant Award</u> , <i>UT Dallas</i>	2025
PPPE Graduate Student Travel Grant, <i>UT Dallas</i>	2023 – 2025
Keith Lankford Taylor Fellowship, <i>UT Dallas</i>	2023
<u>Brian J.L. Berry Scholarship</u> (Highest Honor), <i>UT Dallas</i>	2021 – 2025
UT Dallas Graduate Studies Scholarship, <i>UT Dallas</i>	2021 – 2025
YUPA Graduate Studies Scholarship, <i>Yonsei University</i>	2018 – 2020
<u>President's Award for Outstanding Graduate</u> , <i>Ajou University</i>	2018
Teaching Assistantship for Undergraduate Student, <i>Ajou University</i>	2015 – 2018

Excellence in Undergraduate Research Project, <i>Ajou University</i>	2015
Dean's list, <i>Ajou University</i>	2015
Merit-based Full Tuition Scholarship, <i>Ajou University</i>	2014
Dean's list, <i>Ajou University</i>	2014

TEACHING

[Certificate]

Gradate Teaching Certificate, <i>UT Dallas</i>	2025
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[Co-instructor]

Big Data and Machine Learning for Social Science (with R)	Winter 2026
• <i>Korea Social Science Data Archive</i> (graduate)	(planned)

GIS and Spatial Statistics (with QGIS, GeoDa, and R)	Summer 2025
• <i>Korea Social Science Data Archive</i> (graduate)	
• Rating: 9.91/10	

Advanced GIS and Spatial Statistics (with R)	Summer 2023
• <i>Korea Social Science Data Archive</i> (graduate)	
• Rating: 9.84/10	

Introductory GIS and Spatial Statistics (with QGIS, GeoDa, and STATA)	Summer 2023
• <i>Korea Social Science Data Archive</i> (graduate)	
• Rating: 9.54/10	

[Course Development]

Deep Learning for Social Science (with R)	Winter 2026
<i>Korea Social Science Data Archive</i> (supervisor: Dohyeong Kim at UT Dallas)	

[Guest Lecture]

• Analysis of Variance, undergraduate statistics course (EPPS 2302), <i>UT Dallas</i>	April 2025
• Probability Distributions, undergraduate statistics course (EPPS 2302), <i>UT Dallas</i>	Feb 2025
• Introductory Calculus, graduate statistics course (EPPS 7313), <i>UT Dallas</i>	Sep 2023

[Teaching Assistant]

UT Dallas

• Civil Liberties (undergraduate)	Fall 2024; Fall 2025
• Methods of Quantitative Analysis in the Social and Policy Sciences (undergraduate)	Fall 2022; Spring 2023; Spring 2025
• Economics for Public Policy (graduate)	Spring 2024
• Global Health and Society (undergraduate)	Fall 2023; Spring 2024
• Descriptive and Inferential Statistics (graduate)	Fall 2023
• American National Government (undergraduate)	Spring 2022; Fall 2021

Korea Social Science Data Archive

- Big Data and Machine Learning for Social Science (graduate)
- Introductory and Advanced GIS and Spatial Statistics (graduate)

Winter 2024; 2025
Summer 2022

Yonsei University

- Quantitative Policy Analysis (undergraduate)
- Forecasting Methods and Applications (graduate)

Fall 2019
Spring 2018

Ajou University

- Introduction to Korean Government (undergraduate)
- Research Methods in Public Administration (undergraduate)

Fall 2017
Spring 2016

INVITED TALKS

“Using GIS to Improve Rural Health Service Planning: Lessons from Kilifi County, Kenya”, *Kilifi Department of Health in Kilifi County, Kenya*

Oct 2025

CONFERENCE PRESENTATIONS

* APPAM (Association for Public Policy Analysis and Management); APHA (American Public Health Association); ASPA (American Society for Public Administration); PARC (Public Administration Research Conference); SER (Society for Epidemiologic Research); ASA (American Sociological Association); ACRM (American Congress of Rehabilitation Medicine)

2025 APPAM, APHA, ASA, SER, PARC

2024 APPAM, ACRM, ASPA

2023 APPAM, APHA, ASPA

TECHNICAL SKILLS

Statistical analysis (R, STATA)

Geospatial analysis (R, Arc GIS, QGIS, GeoDa, Tableau)

Machine learning (R, Torch)

DATA ACCESS PROPOSAL

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|-----------------------------------------------------------------------------------------------------------------|------|
| 2. The Impacts of School Neighborhoods on the Academic and Labor Market Outcomes of Students with Disabilities | 2024 |
| • PI: Pyung Kim | |
| • <i>Student-level longitudinal data (1999 – 2023, N ≥ 5,000,000)</i> | |
| • <i>Texas Schools Project</i> | |
| 1. Geospatial Community Mapping to Assess Social and Environmental Barriers and Facilitators for Burn Survivors | 2022 |
| • PI: Karen Kowalske, UTSW Medical Center, UTD | |
| • <i>Patient-level longitudinal data (1994 – 2022, N ≥ 25,000)</i> | |
| • <i>National Institute on Disability, Independent Living, and Rehabilitation Research</i> | |

SERVICE

[Peer Reviewer]

Policy Studies Journal; Scientific Reports; Energy Policy; Energy Economics; International Journal of Finance and Economics; PLOS ONE

[University Service]

Secretary, *Korean Student Association, UT Dallas* 2023 – 2024

Vice President, *Graduate Student Assembly in Public Administration, Yonsei University* 2018 – 2019

Student Mentor, *Office of Admissions, Ajou University* 2014 – 2015