

# Pyung Kim

Postdoctoral Scholar  
 Center for Spatial Studies and Data Science  
 Department of Geography  
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## ACADEMIC APPOINTMENTS

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Postdoctoral Scholar	Jan 2026 –
<i>Center for Spatial Studies and Data Science, Department of Geography, 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

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Ph.D. in Public Policy and Political Economy	2025
<i>The University of Texas at Dallas</i> (Brian J.L. Berry Scholarship, Highest Honor)	
• Fields: Health Policy, Social Policy, Environmental Policy	
• Dissertation: <i>Long-Term Effects of Neighborhoods on Educational Attainment by Disability Status</i>	
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

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Substantive	Public Health, Policy Evaluation, Neighborhood Effects, Disability, Aging
Methodological	GIS, Spatial Data Science, Causal Inference, Quasi-experiment, Machine Learning

## PUBLICATIONS \* Corresponding author; <sup>†</sup> Student co-author

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5. **Kim, P.**, Choi, S.<sup>†</sup>, Kim, D., & Lee, C\*. (2026). “[Bayesian spatio-temporal modeling for policy evaluation: Sensitivity of policy effect estimates in the context of COVID-19 stay-at-home orders.](#)” *PLoS One* 21(2): e0339196.
  4. **Kim, P.**<sup>\*</sup>, Kim D., Scotch R., Jeong D.<sup>†</sup>, & Kowalske K. (2025). “[Geospatial analysis of community-level social and environmental barriers for adult burn injury survivors in North Texas.](#)” *Burns*, 51(5), 107512.
  3. Hong, S.<sup>\*</sup>, Jeong, D.<sup>†</sup>, & **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.
  2. Maxwell, S. P., Brooks, C., **Kim, P.**, Kim, D., McNeely, C. L., & Thomas, K\*. (2023). “[Understanding habitats and environmental conditions of white-tailed deer population density and public health data to aid in assessing human tick-borne disease risk.](#)” *Microorganisms*, 11(4), 865.
  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.
- [In Korean]
2. Han, M.S. <sup>†</sup>, & **Kim, P.** (2022). “[Analysis of factors affecting corporate participation in Carbon Disclosure Project: Organizational Institutionalism perspective](#)”. *GRI Review*, 18(1), 181-209.
  1. **Kim, P.**, & Kim, S. Y \*. (2017). “[Analyzing the opposition to nuclear power energy on the Internet: Focusing on the moderating effect of policy efficacy](#)”. *Crisisconomy*, 13(3), 1-15.

## UNDER REVIEW

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

Kim, H.<sup>†</sup>, **Kim, P.**<sup>\*</sup>, “Modeling Policy Diffusion Across Space and Time: A Bayesian Spatial–Temporal Approach”

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

## WORKING PAPERS

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“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)

“Spatial Mismatch and Retirement Transitions: Evidence from Unexpected Residential Relocation” (with Peter Kedron)

**GRANTS** Non-U.S. awards are reported in USD using award-date exchange rates, rounded to the nearest dollar.

I have participated in awarded grants totaling \$3,717,126, of which my recognized contribution was \$33,800.

## [Under Review]

1. Spatial Mismatch and Retirement Transitions: Evidence from Unexpected Residential Relocation 2026
- Role: Key Personnel
  - PI: Peter Kedron, UC Santa Barbara
  - *Alfred P. Sloan Foundation via the University of Michigan (\$50,000)*

## [PI / Co-PI]

1. [What Is the Relationship Between Adolescent Neighborhood Environments and Long-Run Labor Market Outcomes for Children with Disabilities?](#) 2024 – 2025
- PI: Pyung Kim, UTD
  - *Social Security Administration via Retirement and Disability Research Center at UW-Madison (\$6,000; Recognition: \$6,000)*
2. The Geography of Disability Inclusion: The Long-Term Impacts of Neighborhoods on Children with Disabilities in Texas 2025
- PI: Pyung Kim, UTD
  - *UT Dallas & Pioneer Natural Resources (\$1,000; Recognition: \$1,000)*

## [Key Personnel]

4. Interventional Study to Prevent Exacerbation of Atopic Dermatitis by Exposure to Particulate Matter 2024 – 2027
- Role: Data Scientist
  - PI: Kangmo Ahn, *Samsung Medical Center*
  - *Korea Disease Control and Prevention Agency (\$629,630; Recognition: \$4,600)*
3. [Geospatial Community Mapping to Assess Social and Environmental Barriers and Facilitators for Burn Survivors](#) 2022 – 2026
- Role: GIS Specialist
  - PI: Karen Kowalske, *UTSW Medical Center*; co-PI: Dohyeong Kim & Richard Scotch, *UTD*
  - *National Institute on Disability, Independent Living, and Rehabilitation Research (\$2,320,495; Recognition: \$12,600)*
2. The Capacity-Building Project for Primary Healthcare Workforce to Improve Maternal and Child Oral Health in Kilifi County, Kenya 2025 – 2026
- Role: GIS Specialist (**field study in Kenya, October 2025**)
  - PI: Hyewon Lee, *Seoul National University*
  - *Korea International Cooperation Agency (\$440,000; Recognition: \$5,600)*
1. Spatial Distribution of Natural Radiation in Jeonbuk and Jeonnam Provinces 2023 – 2025
- Role: GIS Specialist
  - PI: Yeol Rho, *Chonnam National Univ.*; co-PI: Dohyeong Kim, *UTD*
  - *National Institute of Environmental Research of Korea (\$320,000; Recognition: \$4,000)*

**[Research Assistant]**

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"> <li>• Role: Research Assistant</li> <li>• PI: Hyunsuk Ryu, <i>Korea Institute of Public Administration</i></li> <li>• <i>Korea Software Policy &amp; Research Institute</i></li> </ul>	
3. An Analysis of the Local Government Social Welfare Budget	2018
<ul style="list-style-type: none"> <li>• Role: Research Assistant</li> <li>• PI: Jaejin Yang, <i>Yonsei University</i></li> <li>• <i>Korea Ministry of Health and Welfare</i></li> </ul>	
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"> <li>• Role: Research Assistant</li> <li>• PI: Seoyong Kim, <i>Ajou University</i></li> <li>• <i>Korea Foundation of Nuclear Safety</i></li> </ul>	
1. Track and Analyze the Performance of Technological Development Project for Original Research	2015
<ul style="list-style-type: none"> <li>• Role: Research Assistant</li> <li>• PI: Seoyong Kim, <i>Ajou University</i></li> <li>• <i>National Research Foundation of Korea</i></li> </ul>	

**AWARDS AND HONORS****[External Awards]**

Public Administration Research Conference Travel Award, <i>University of Central Florida</i>	2025
<a href="#"><u>JSIT Research Grant</u></a> , <i>Social Security Administration via UW-Madison</i>	2024
<a href="#"><u>Junior Scholar Intensive Training (JSIT)</u></a> , <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), awarded by the Deputy Prime Minister; funded by the Korea Student Aid Foundation	2015 – 2018

**[Internal Awards]**

PPPE Graduate Student Travel Grant, <i>UT Dallas</i>	2023 – 2025
Keith Lankford Taylor Fellowship, <i>UT Dallas</i>	2023
<a href="#"><u>Brian J.L. Berry Scholarship</u></a> (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

## INVITED TALKS

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“Long-Term Effects of Neighborhoods on Educational Attainment by Disability Status”, <i>Department of Geography, University of California, Santa Barbara, USA</i>	Feb 2026
“Quasi-Experimental Mover Designs for Identifying Neighborhood Effects”, <i>Department of Geography, University of California, Santa Barbara, USA</i>	Feb 2026
“Using GIS to Improve Rural Health Service Planning: Lessons from Kilifi County, Kenya”, <i>Kilifi Department of Health in Kilifi County, Kenya</i>	Oct 2025

## TEACHING

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<u>[Certificate]</u>	
Gradate Teaching Certificate, <i>UT Dallas</i>	2025
<u>[Co-Instructor]</u>	
Machine Learning and Deep Learning for Social Science (with R) • <i>Korea Social Science Data Archive</i> (graduate)	Winter 2026 (planned)
GIS and Spatial Statistics (with QGIS, GeoDa, and R) • <i>Korea Social Science Data Archive</i> (graduate) • Rating: 9.91/10	Summer 2025
Advanced GIS and Spatial Statistics (with R) • <i>Korea Social Science Data Archive</i> (graduate) • Rating: 9.84/10	Summer 2023
Introductory GIS and Spatial Statistics (with QGIS, GeoDa, and STATA) • <i>Korea Social Science Data Archive</i> (graduate) • Rating: 9.54/10	Summer 2023

<u>[Guest Lecture]</u>	
• 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 Fall 2022; Spring 2023;  
(undergraduate) 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) Winter 2024; 2025
- Introductory and Advanced GIS and Spatial Statistics (graduate) Summer 2022

#### *Yonsei University*

- Quantitative Policy Analysis (undergraduate) Fall 2019
- Forecasting Methods and Applications (graduate) Spring 2018

#### *Ajou University*

- Introduction to Korean Government (undergraduate) Fall 2017
- Research Methods in Public Administration (undergraduate) Spring 2016

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## PROFESSIONAL MEMBERSHIPS

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

2025 APPAM, APHA, ASA, SER

2024 APPAM, ACRM, ASPA

2023 APPAM, APHA, ASPA

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## TECHNICAL SKILLS

Statistical Analysis (R, STATA)

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

Machine Learning / Deep Learning (R)

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## DATA ACCESS

2. The Impacts of School Neighborhoods on the Academic and Labor Market Outcomes of Students with Disabilities 2024

- **PI: Pyung Kim**
- *Student-level longitudinal data (1999 – 2023, N ≥ 5,000,000)*
- *Texas Schools Project*

1. Geospatial Community Mapping to Assess Social and Environmental Barriers and Facilitators for Burn Survivors 2022
- *PI: Karen Kowalske, UTSW Medical Center, UTD*
  - *Patient-level longitudinal data (1994 – 2022, N ≥ 25,000)*
  - *National Institute on Disability, Independent Living, and Rehabilitation Research*

## **SERVICE**

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### [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