

# Pyung Kim

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

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>	

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## 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)	
• 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	

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## RESEARCH AREAS

Substantive	Health Policy, Environmental Health, Neighborhood Effects, Disability, Aging
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**


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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.†, **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**


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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)

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

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

## GRANTS

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

### [Under Review]

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| 1. Spatial Mismatch and Retirement Transitions: Evidence from Unexpected Residential Relocation  | 2026 |
| <ul style="list-style-type: none"> <li>• Role: Key Personnel</li> <li>• PI: Peter Kedron, UC Santa Barbara</li> <li>• <i>Alfred P. Sloan Foundation via the University of Michigan (\$50,000)</i></li> </ul> |      |

### [PI / Co-PI]

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|---|-------------|
| 1. <a href="#"><u>What Is the Relationship Between Adolescent Neighborhood Environments and Long-Run Labor Market Outcomes for Children with Disabilities?</u></a>                            | 2024 – 2025 |
| <ul style="list-style-type: none"> <li>• PI: Pyung Kim, UTD</li> <li>• <i>Social Security Administration via Retirement and Disability Research Center at UW-Madison (\$6,000)</i></li> </ul> |             |
| 2. The Geography of Disability Inclusion: The Long-Term Impacts of Neighborhoods on Children with Disabilities in Texas   | 2025        |
| <ul style="list-style-type: none"> <li>• PI: Pyung Kim, UTD</li> <li>• <i>UT Dallas &amp; Pioneer Natural Resources (\$1,000)</i></li> </ul>  |             |

### [Key Personnel]

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| 4. Interventional Study to Prevent Exacerbation of Atopic Dermatitis by Exposure to Particulate Matter   | 2024 – 2027 |
| <ul style="list-style-type: none"> <li>• Role: Data Scientist</li> <li>• PI: Kangmo Ahn, <i>Samsung Medical Center</i></li> <li>• <i>Korea Disease Control and Prevention Agency (\$629,630)</i></li> </ul>  |             |
| 3. <a href="#"><u>Geospatial Community Mapping to Assess Social and Environmental Barriers and Facilitators for Burn Survivors</u></a>   | 2022 – 2026 |
| <ul style="list-style-type: none"> <li>• Role: GIS Specialist</li> <li>• PI: Karen Kowalske, <i>UTSW Medical Center</i>; co-PI: Dohyeong Kim &amp; Richard Scotch, <i>UTD</i></li> <li>• <i>National Institute on Disability, Independent Living, and Rehabilitation Research (\$2,320,495)</i></li> </ul> |             |
| 2. 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"> <li>• Role: GIS Specialist (<b>field study in Kenya, October 2025</b>)</li> <li>• PI: Hyewon Lee, <i>Seoul National University</i></li> <li>• <i>Korea International Cooperation Agency (\$440,000)</i></li> </ul>  |             |
| 1. Spatial Distribution of Natural Radiation in Jeonbuk and Jeonnam Provinces  | 2023 – 2025 |
| <ul style="list-style-type: none"> <li>• Role: GIS Specialist</li> <li>• PI: Yeol Rho, <i>Chonnam National Univ.</i>; co-PI: Dohyeong Kim, <i>UTD</i></li> <li>• <i>National Institute of Environmental Research of Korea (\$320,000)</i></li> </ul>   |             |

## AWARDS AND HONORS

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### [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]

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

## INVITED TALKS

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“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
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## TEACHING

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### [Certificate]

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

Machine Learning and Deep Learning for Social Science (with R) Winter 2026  
 • *Korea Social Science Data Archive* (graduate) (planned)

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

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

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

**[Guest Lecture]**

- Analysis of Variance, undergraduate statistics course (EPPS 2302), *UT Dallas* April 2025
- Probability Distributions, undergraduate statistics course (EPPS 2302), *UT Dallas* Feb 2025
- Introductory Calculus, graduate statistics course (EPPS 7313), *UT Dallas* 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

## CONFERENCE PRESENTATIONS

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\* 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); AAG (Association of American Geographers)

2026 AAG

2025 APPAM, APHA, ASA, SER, PARC

2024 APPAM, ACRM, ASPA

2023 APPAM, APHA, ASPA

## TECHNICAL SKILLS

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Statistical analysis (R, STATA)

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

Machine learning (R Keras)

## DATA ACCESS

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| <p>2. The Impacts of School Neighborhoods on the Academic and Labor Market Outcomes of Students with Disabilities</p> <ul style="list-style-type: none"> <li>• PI: <b>Pyung Kim</b></li> <li>• Student-level longitudinal data (1999 – 2023, <math>N \geq 5,000,000</math>)</li> <li>• Texas Schools Project</li> </ul><br><p>1. Geospatial Community Mapping to Assess Social and Environmental Barriers and Facilitators for Burn Survivors</p> <ul style="list-style-type: none"> <li>• PI: Karen Kowalske, UTSW Medical Center, UTD</li> <li>• Patient-level longitudinal data (1994 – 2022, <math>N \geq 25,000</math>)</li> <li>• National Institute on Disability, Independent Living, and Rehabilitation Research</li> </ul> | <p>2024</p> <p>2022</p> |
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## 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]

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| <p>Secretary, Korean Student Association, UT Dallas</p> <p>Vice President, Graduate Student Assembly in Public Administration, Yonsei University</p> <p>Student Mentor, Office of Admissions, Ajou University</p> | <p>2023 – 2024</p> <p>2018 – 2019</p> <p>2014 – 2015</p> |
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