

# Pyung Kim

Postdoctoral Scholar  
 Center for Spatial Studies and Data Science  
 Department of Geography  
 University of California, Santa Barbara (Ellison Hall, Office 5841)  
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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; † Student co-author

5. **Kim, P.**, Choi, S.†, 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. (<https://doi.org/10.1371/journal.pone.0339196>).
4. **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. (<https://doi.org/10.1016/j.burns.2025.107512>).
3. 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. (<https://doi.org/10.1016/j.jcrimjus.2024.102156>).
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. (<https://pubmed.ncbi.nlm.nih.gov/37110288/>).
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 (<https://doi.org/10.1016/j.enpol.2021.112773>).

**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.**, 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)

“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]

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|---|-------------------------|
| <p>1. <a href="#"><u>What Is the Relationship Between Adolescent Neighborhood Environments and Long-Run Labor Market Outcomes for Children with Disabilities?</u></a></p> <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; Recognition: \$6,000)</i></li></ul> <p>2. The Geography of Disability Inclusion: The Long-Term Impacts of Neighborhoods on Children with Disabilities in Texas</p> <ul style="list-style-type: none"><li>• PI: Pyung Kim, UTD</li><li>• <i>UT Dallas &amp; Pioneer Natural Resources (\$1,000; Recognition: \$1,000)</i></li></ul> | 2024 – 2025<br><br>2025 |
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#### [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</i> (\$629,630; Recognition: \$4,600)</li></ul>   |             |
| 3. <u>Geospatial Community Mapping to Assess Social and Environmental Barriers and Facilitators for Burn Survivors</u>  | 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</i> (\$2,320,495; Recognition: \$12,600)</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</i> (\$440,000; Recognition: \$5,600)</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</i> (\$320,000; Recognition: \$4,000)</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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“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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### [Certificate]

Gradate Teaching Certificate, *UT Dallas*

2025

### [Co-Instructor]

Machine Learning and Deep Learning for Social Science (with R)

Winter 2026  
(planned)

- *Korea Social Science Data Archive* (graduate)

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*
- Probability Distributions, undergraduate statistics course (EPPS 2302), *UT Dallas*
- Introductory Calculus, graduate statistics course (EPPS 7313), *UT Dallas*

April 2025  
Feb 2025  
Sep 2023

### [Teaching Assistant]

*UT Dallas*

- Civil Liberties (undergraduate)
- Methods of Quantitative Analysis in the Social and Policy Sciences (undergraduate)
- Economics for Public Policy (graduate)
- Global Health and Society (undergraduate)
- Descriptive and Inferential Statistics (graduate)
- American National Government (undergraduate)

Fall 2024; Fall 2025  
Fall 2022; Spring 2023;  
Spring 2025  
Spring 2024  
Fall 2023; Spring 2024  
Fall 2023  
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

## 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 (planned)
- 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 / Deep Learning (R)

## DATA ACCESS

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| 2. The Impacts of School Neighborhoods on the Academic and Labor Market Outcomes of Students with Disabilities   | 2024 |
| <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>  |      |
| 1. Geospatial Community Mapping to Assess Social and Environmental Barriers and Facilitators for Burn Survivors  | 2022 |
| <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> |      |

## 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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|---|-------------|
| 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 |