# Pyung Kim

Postdoctoral Scholar
Center for Spatial Studies and Data Science
Department of Geography
University of California, Santa Barbara

Ellison Hall, Office 584
pyungkim@ucsb.edu | https://pyungkim.github.io | Google Scholar

## ACADEMIC APPOINTMENTS

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

## EDUCATION

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

## RESEARCH AREAS

| | |
|---|---|
| **Substantive** | Health Policy, Social Policy, Disability, Aging, Mobility, Environmental Health |
| **Methodological** | GIS, Spatial Data Science, Causal Inference, Quasi-experiment, Machine Learning |

## PUBLICATIONS <small>* *Corresponding author,* † *Student co-author*</small>

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]

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)

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* (*NIDILRR*; $2,320,495)

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)

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)*

[Completed]

5. 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)*

4. A Study on International Standards of Software Safety Assessment and Legal Arrangement of Domestic and Foreign Countries                                      2020
   - Role: Research Assistant
   - PI: Hyunsuk Ryu, *Korea Institute of Public Administration*
   - *Korea Software Policy & Research Institute*

3. An Analysis of the Local Government Social Welfare Budget                                    2018
   - Role: Research Assistant
   - PI: Jaejin Yang, *Yonsei University*
   - *Korea Ministry of Health and Welfare*

2. Analysis of National Distrust Structure of Nuclear Safety Regulations and        2015 – 2016
   Development of Risk Communication Strategies for Recovering Trust
   - Role: Research Assistant
   - PI: Seoyong Kim, *Ajou University*
   - *Korea Foundation of Nuclear Safety*

1. Track and Analyze the Performance of Technological Development Project for         2015
   Original Research
   - Role: Research Assistant
   - PI: Seoyong Kim, *Ajou University*
   - *National Research Foundation of Korea*

## AWARDS AND HONORS

[External Awards]

| | |
|---|---|
| Public Administration Research Conference Travel Award, *University of Central Florida* | 2025 |
| JSIT Research Grant, *Social Security Administration via UW-Madison* | 2024 |
| Junior Scholar Intensive Training (JSIT), *Social Security Administration via UW-Madison* | 2024 |
| President Travel Award for APPAM, *Korean Association for Policy Studies* | 2023 |
| Brain Korea 21 PLUS Scholarship, *National Research Foundation* | 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]

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|---|---|
| GIS Pioneer Research Grant Award, *UT Dallas* | 2025 |
| PPPE Graduate Student Travel Grant, *UT Dallas* | 2023 – 2025 |
| Keith Lankford Taylor Fellowship, *UT Dallas* | 2023 |
| Brian J.L. Berry Scholarship (Highest Honor), *UT Dallas* | 2021 – 2025 |
| UT Dallas Graduate Studies Scholarship, *UT Dalla* | 2021 – 2025 |
| YUPA Graduate Studies Scholarship, *Yonsei University* | 2018 – 2020 |
| President's Award for Outstanding Graduate, *Ajou University* | 2018 |
| Teaching Assistantship for Undergraduate Student, *Ajou University* | 2015 – 2018 |
| Excellence in Undergraduate Research Project, *Ajou University* | 2015 |
| Dean's list, *Ajou University* | 2015 |
| Merit-based Full Tuition Scholarship, *Ajou University* | 2014 |
| Dean's list, *Ajou University* | 2014 |

## TEACHING

[Certificate]

Gradate Teaching Certificate, *UT Dallas*                                                    2025

[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
- *Korea Social Science Data Archive* (graduate                                        2023
- *Rating: 9.84/10*

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

[Course Development]

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

[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)
- 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 Keras)

## DATA ACCESS PROPOSAL

2. The Impacts of School Neighborhoods on the Academic and Labor Market Outcomes of Students with Disabilities
   - *PI: **Pyung Kim***
   - *Student-level longitudinal data (1999 – 2023, N $\geq$ 5,000,000)*
   - *Texas Schools Project*

2024

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

2022

## 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