

Jisoo Hur

Postdoctoral researcher
Chair of Technology and Innovation Management
TUM School of Management, Technical University of Munich
Jisoo.hur@tum.de
+49 157 39089156

EDUCATION

Seoul National University , Seoul, Korea	2020.03.01 ~ 2024.02.26
Ph.D. in Engineering Major: Technology Management, Economics, and Policy Program Integrated Major: Smart City Global Convergence Dissertation Title: "Essays on the relationship between design and technology innovation: The synergistic interaction effect on firm performance"	
KDI School of Public Policy and Management , Sejong, Korea	2017.02.06 ~ 2019.01.31
M.S. in Development Policy Dissertation Title: "Determinants of entrepreneurship: The quality of institutions and cultural characteristics"	
Griffith University , Brisbane, Australia	2016.11.01 ~ 2017.03.22
G.C. in Teaching of English to Speakers of Other Languages	
Australian National University , Canberra, Australia	2013.02.01 ~ 2015.12.18
B.S. in Asia-Pacific Studies	

EMPLOYMENT

Technical University of Munich , Munich, Germany	2024.09.01 ~ <i>present</i>
Chair of Technology and Innovation Management Postdoctoral Researcher (Full-time)	
Seoul National University , Seoul, Korea	2024.03.01 ~ 2024.07.31
Global R&DB Center Postdoctoral Researcher (Full-time)	
Science and Technology Policy Institute , Sejong, Korea	2019.05.01 ~ 2019.11.31
Division of Research on Innovation Policy for Growth Researcher (Full-time)	
Korea Research Institute for Vocational Education and Training , Sejong, Korea	2018.01.01 ~ 2018.12.31
Associate Research Fellow (Part-time)	

RESEARCH INTERESTS

Topics: Inventor Mobility and Collaboration, Regional Knowledge Spillover, and the Semantic Proximity of Knowledge

Methodologies: Patent Analysis, Econometric Analysis, Social Network Analysis, Machine Learning, Causal Inference, Propensity Score Matching (PSM), Text Analysis (incl. Natural Language Processing and Topic Modelling), Principal Component Analysis (PCA), K-Means Clustering and Classification

LANGUAGES

Korean (Mother-tongue)

English (10 years of living in Australia)

Fluent in speaking, listening, writing, and working

OPIc (ACTFL Oral Proficiency Interview) for English: Advanced Low (highest level achieved)

Japanese

Intermediate level of speaking and listening

SOFTWARE & PROGRAMMING SKILLS

Fluent usage at big data handling, econometric analysis, and data visualization

Languages: Python, SQL, R

Statistics and econometric analysis: STATA, SPSS

Network analysis (incl. visualization): Python, R, Gephi, VOSviewer

Database: PostgreSQL, DBeaver

Web-crawling: Python

Text analysis (Natural Language Processing): Python

Clustering and classification: Python

Dimension Reduction: Python

Qualitative Data analysis: MAXQDA

INTERNATIONAL PUBLICATIONS

Hur, J., & Kim, K*. 2023. Technology complexity and firm performance: The moderating effect of design innovation. *European Conference on Innovation and Entrepreneurship*, 18, 978–987.

<https://doi.org/10.34190/ecie.18.2.1418>.

Hur, J., Hwang, J., & Kim, K*. 2024. The role of design engineers: Evidence from intra-firm collaboration and knowledge networks. *PLOS ONE*, 19(2), e0898089.

<https://doi.org/10.1371/journal.pone.0298089>.

Hur, J., Hwang, J., Kim, G., & Kim, K*. 2024. The moderating effect of design-engineering capability on the relationship between firms' innovation activity and performance. *2023 IEEE International Conference on Technology Management, Operations and Decisions (ICTMOD)*.

[10.1109/ICTMOD59086.2023.10472904](https://doi.org/10.1109/ICTMOD59086.2023.10472904).

Hur, J., Hwang, J., & Kim, K*. 2024. The moderating role of design innovation in the relationship between technology complexity and firm performance. *Technology Analysis and Strategic Management*. <https://doi.org/10.1080/09537325.2024.2336555>.

- Chun, Y., **Hur, J.**, & Hwang, J*. 2024. AI technology specialization and national competitiveness. *PLOS ONE*. <https://doi.org/10.1371/journal.pone.0301091>.
- (In Press) **Hur, J.**, Hwang, J., & Kim, K*. 2025. The impact of design and technology capability on patent quality: Exploring the role of interdisciplinary inventors and their technological knowledge. *R&D Management*.
- (Working Paper) **Hur, J.**, Lee, S., Hwang, J., & Kim, K*. Who to collaborate?: Exploring the role of knowledge overlap between inventors in innovation performance
- (Working Paper) Kim, K., Kogler, D. F., **Hur, J***. Semantic proximity in quantum and overall scientific publications: BERTopic and BERT-similarity applications for mapping regional knowledge spaces
- (Working Paper) **Hur, J.**, Lee, S., & Kim, K*. Cross-industry mobility of inventors and its impact on patent novelty
- (Working Paper) **Hur, J.**, Hwang, J., Kim, G., & Kim, K*. Integrating design and technological innovation: Implications for new product development and firm performance
- (Working Paper) **Hur, J.**, & Henkel, J*. The dynamics of junior-senior inventor collaboration: How team hierarchy shapes explorative innovation
- (Working Paper) **Hur, J.**, Lee, S., Maliphol, S., & Kim, K*. AI partnerships for sustainability: The role of entrepreneurial learning in ESG transformation

INTERNATIONAL CONFERENCE PARTICIPATION

- Hur, J.** 2025. The Role of Team Composition in Explorative Invention: Analysing the Impact of Tenure Disparity and Team Size. *European Academy of Management Conference*. June 25th.
- Hur, J.**, Hwang, J., Kim, G., & Kim, K. 2023. The Moderating Effect of Design-engineering Capability on the Relationship between Firms' Innovation Activity and Performance. *5th IEEE International Conference on Technology Management, Operations and Decisions (ICTMOD)*. November 23rd.
- Hur, J.**, & Kim, K. 2023. Technology Complexity and Firm Performance: The Moderating Effect of Design Innovation. *18th European Conference on Innovation & Entrepreneurship (ECIE)*. September 21st.
- Hur, J.**, Hwang, J., Kim, K. 2023. Exploring the Role of Design-engineers in a Firm's Collaborative and Knowledge Network. *Society of Interdisciplinary Business Research (SIBR) 2023 Seoul Conference*. June 2nd.
- Hur, J.**, Hwang, J., Kim, K. 2023. The Value of Integrating Design and Technology: Exploring the Role of Design-Engineers in Invention Value. *Society of Interdisciplinary Business Research (SIBR) 2023 Osaka Conference*. July 7th.
- Hur, J.**, Hwang, J., Kim, K. 2022. The Impact of Design Patents on Firm Performance: The Moderating Effect of Technology Complexity. *US Korea Conference (UKC) 2022 on Science and Technology in the Wake of the Pandemic*. August 19th.

PROJECTS & REPORTS

- 2017 The Asia Foundation Study Visit to Thailand**, Bangkok, Thailand
International Sustainable Development Cooperation: South-South and Triangular Cooperation
- 2017 UNESCO Better Education for Africa's Rise**
Korea Research Institute for Vocational Education and Training, Sejong, Korea

2018 Merry Year International Internships, Vinh Long, Vietnam

KOICA-Merry Year International Microcredit Project

2018 OECD Programme for the International Assessment of Adult Competencies

Korea Research Institute for Vocational Education and Training, Sejong, Korea

2021 KDI-IDB Invest Research on the Digital Transformation and Ecosystem of Korea

Report title: “Research on the Digital Transformation and Ecosystem of Korea applicable to Latin American and Caribbean Companies”

Science and Technology Policy Institute (STePI) Policy Research Reports

Lee, Y., Lee, J., Lim, C., & **Hur, J.** 2019. Innovative Startup and Entrepreneurship Ecosystem Monitoring, Science and Technology Policy Institute.

Kim, S., Jeon, J., & **Hur, J.** 2019. Strategies for Invigorating Lab-oriented Technology Commercialization, Science and Technology Policy Institute.

Kim, S., Jung, M., Oh, S., Song, E., Lim, C., & **Hur, J.** 2019. Analysis and Challenges of Regional Innovation Ecosystems in the Era of Transition, Science and Technology Policy Institute.

Kim, S., Oh, Y., Lee, H., Sul, G., & **Hur, J.** 2019. An In-depth Assessment of Government-funded Projects. Science and Technology Policy Institute.

Jeon, J., & **Hur, J.** 2019. A Survey on Entrepreneurship, Science and Technology Policy Institute.

Kim, S., Jung, M., Kim, Y., & **Hur, J.** 2019. A Study on How to Support Startups and Corporate Ventures, Science and Technology Policy Institute.

AWARDS & SCHOLARSHIPS

2017 Dean’s List Scholarship, KDI School of Public Policy and Management

2018 Dean’s List Scholarship, KDI School of Public Policy and Management

2022 Support for Global Academic Activities, Korea Foundation for Women in Science, Engineering and Technology (WISET)

2022 Best Paper Award, TEMEP-Korea Society of Innovation (KSOI) Workshop

2023 Best Ph.D. Paper Award, The 18th European Conference on Innovation and Entrepreneurship (ECIE)

2023 Paper Excellence Award, The 19th Korea Management Association Consultants Academic Paper Contest (KMAC)

TEACHING EXPERIENCE

Technical University of Munich, Munich, Germany

Technology and Innovation Management: Introduction (Bachelor), 2025-Summer

Technology and Innovation Management: Introduction (Master), 2025-Summer

Advanced Seminar Innovation & Entrepreneurship: Current Issues in Technology Management, 2024-Winter

Ulsan National Institute of Science and Technology, Ulsan, South Korea

Statistical Learning, 2024-Spring

Seoul National University, Seoul, South Korea

Seminar on Econometrics for New Students, 2023-Summer ~ 2023-Winter

TA for Introduction to Smart City Global Convergence, 2020-Fall ~ 2021-Spring

REFERENCES

Prof. Junseok Hwang

Professor
Technology Management, Economics and Policy Program
Seoul National University
Seoul, South Korea
givealltoyou@gmail.com
+82 10 9771 1222
Relationship: Research supervisor

Prof. Keungoui Kim

Assistant Professor
School of Applied Artificial Intelligence
Handong Global University
Pohang, South Korea
awekim@handong.edu
+82 10 7390 3280
Relationship: Research supervisor

Dr. Youngsam Chun

Senior Researcher
Institute of Convergence Technology
Korea Telecom
Seoul, South Korea
deep1003@snu.ac.kr
+82 10 3458 0070
Relationship: Research co-worker