

Suhyeon Lee

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Seoul, Republic of Korea

RESEARCH INTERESTS

Substantive Areas: Technology Adoption, Human-Computer Interaction, Generative AI

Methodological Areas: AI Agents, Large Language Models, Design Science Research, Causal Inference

EDUCATION

- **Korea Advanced Institute of Science and Technology (KAIST)** (exp.) Feb. 2026
M.S. in Management Engineering, Advisor: Prof. Donghyuk Shin
Seoul, Korea
- **Carnegie Mellon University** Dec. 2024 - Jul. 2025
Visiting Student (AI Intensive Program)
Pittsburgh, United States
- **Hankuk University of Foreign Studies** Feb. 2024
B.B.A.; B.S. in Computer & Electronic System Engineering
Seoul, Korea
- **Eastern New Mexico University** Jan. 2022 - Jun. 2022
Exchange Student
Portales, United States

PUBLICATIONS

- [1] Lee, S., Y. Yu, D. Shin, & R. Singh (2025). **PlaceSim: An LLM-based Interactive Platform for Human Behavior Simulation in Physical Facilities**. In *Proceedings of the 34th ACM International Conference on Information and Knowledge Management (CIKM '25)*, November 10–14, 2025, Seoul, Republic of Korea. (Forthcoming)
- [2] Lee, S., Y. Suh, S. Kim, J. Lee, & W. Yun (2022). **Machine Learning based Optimal Location Modeling for Children's Smart Pedestrian Crosswalk: A Case Study of Changwon-si**. *KIBIM Magazine*, 12(2), 1–11. (indexed in the Korea Citation Index)
- [3] Suh, Y., S. Lee, S. Jung, D. Jung, & W. Yun (2021). **The Impact of Healthfulness on Firm Performance: The Case of Food Companies in South Korea**. *Journal of Product Research*, 39(4), 57–65. (indexed in the Korea Citation Index)

RESEARCH EXPERIENCE

- **An LLM-Driven Simulation Framework for Environmental Human Behavior** with Y. Yoo & D. Shin
 - Developed Person-Environment-Situation (P.E.S.) framework extending Lewin's behavioral theory for LLM-based spatial choice prediction
 - Validated framework against 789K real usage records achieving 83% accuracy improvement over existing methods
 - Implemented multi-agent system for Cold-Start prediction where historical behavioral data is unavailable
- **Regulating AI-Generated Content: When Do Restrictions Spark or Stifle Community Dynamics** with J. Shin, D. Shin, & W. Oh
 - Examined AI content bans across 743 Reddit communities using difference-in-differences methodology
 - Found opposing effects by community type: decreased participation in information-focused vs increased engagement in creativity-focused communities
 - Established that AI restrictions function as authenticity signals in creative spaces
- **AI Summarization's Impact on Creator Multimodal Content Strategies** with D. Shin
 - Investigating creator adaptation to text-only AI summarization using Google Maps and Amazon platforms
 - Analyzing how asymmetric AI processing influences multimodal content creation strategies




CONFERENCE PRESENTATIONS

- **Regulating AI-Generated Content: When Do Restrictions Spark or Stifle Community Dynamics** (Second author)
 - Workshop on Information Systems and Economics (WISE), Nov. 2025
 - KMIS (Best student paper), Dec. 2025
- **Dynamics of Online WOM and Performance: The Differential Role of Social Media Platforms** (Equal contribution)
 - AMA Winter Academic Conference, Feb. 2022
 - ISMS Marketing Science Conference, Jul. 2025
- **Does Regulation Work as Intended? Impact of COVID-19 on Online Game Consumption** (First author)
 - International Conference of Asian Marketing Associations, Sep. 2022
- **The Impact of Healthfulness and Front-of-Package (FOP) on Brand Performance** (Second author)
 - AMA Marketing and Public Policy Conference, Jun. 2021

WORK EXPERIENCES

- **Pintel (Seoul, Korea) - AI Team, Researcher** Oct. 2023 - Feb. 2024
 - Built an image captioning pipeline (BLIP) for children's safety-zone image data as part of the Government AI Training Data Construction Support Project
- **MINDs and Company (Seoul, Korea) - Data Science Team, Intern** Mar. 2023 - Aug. 2023
 - Implemented OpenCV-based abnormal image data detection systems for quality control
 - Developed segmentation models for damage location identification and severity prediction

SELECTED PROJECTS

- **PaperFlow: LLM-Driven Academic Paper Analysis Platform - Prompt Engineer** Aug. - Dec. 2024
 - Received \$15K funding from KAIST AI Education Innovation Project 
 - Designed LLM prompts for IMRD and Claim-Evidence visualization generation
 - Developed Chain-of-Thought reasoning prompts achieving high accuracy in academic feedback generation across multiple domains
- **Brat Smart Digital Twin WMS - Back-end Developer** Mar. - Jul. 2025
 - Tools: AWS Lambda, API Gateway, Digital Twin 
 - Developed backend architecture with microservices for document verification, RFID tracking, and picking optimization
- **HUFS Web Community - Back-end Developer** Jun. - Aug. 2021
 - Tools: Django, PostgreSQL, Heroku 
 - Implemented core backend architecture using Django framework and managed PostgreSQL database deployment

SELECTED COURSEWORK

- Applied Econometrics, Panel Data, Statistical Analysis, Research Methods in Behavioral Science
- Deep Learning, Machine Learning, Data Structures, Algorithms
- Consumer Behavior, Market Research
- Linear Algebra, Mathematical Statistics

ACTIVITIES & LEADERSHIP

- **KOCIA MBA Student Mentor** Mar. - Dec. 2024
 - Provided comprehensive support to MBA students from developing countries including hospital visits, cultural activities, and daily life assistance
- **KAIST-Seoul City Python Education Program - Teaching Assistant** Mar. - Jun. 2024
 - Assisted 70+ residents with no prior programming experience in learning Python fundamentals
- **QMS (Quantitative Marketing Seminar) - Founder & President** Mar. - Dec. 2022
 - Founded and led academic society focused on data science education and quantitative research methods

HONORS AND AWARDS

- **Korea Big Data Institute Bigcontest Competition - 1st Prize (\$3,500)** Dec. 2022
- **GSOK-NEXON Academic Thesis Competition - 2nd Prize (\$1,500)** Nov. 2022
- **KMAC Management Innovation Academic Thesis Competition - 3rd Prize (\$1,500)** Dec. 2021
- **KMAC Management Innovation Academic Thesis Competition - 2nd Prize (\$3,500)** Dec. 2020

SCHOLARSHIPS

- **National Humanities and Social Sciences Undergraduate Scholarship** Mar. 2021 - Feb. 2024
- **Dean's Scholarship for Outstanding Business Student** Apr. 2021

SKILLS

- Programming Languages: Python, C/C++, R, SQL
- Languages: Korean (Native), English (Fluent)