Leehee Kim

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Bio

I am a Ph.D. student in Industrial Engineering at Seoul National University, South Korea. My research interests include technology forecasting, AI-human interaction, and patent analysis. I am currently working under the supervision of Professor Sungjoo Lee in the Technology Intelligence Lab. I am currently visiting the Human-Computer Interaction Institute (HCII) at Carnegie Mellon University as a Collaborative Researcher in Professor John Zimmerman's lab.

Education

Mar 2016 – Feb 2022
Bachelor of Arts, Business Administration, and Engineering, Sogang University, South Korea
Triple Majors in Philosophy, Business Administration, and BigData Science
GPA : 4.18 / 4.5 (Summa Cum Laude)

Mar 2022 – Feb 2024
Master of Engineering in Industrial Engineering, Seoul National University, South Korea
Thesis : Comparing Patent Network Methods for Extracting Technology Intelligence
Advisor : Prof. Sungjoo Lee

Mar 2024 –
Ph.D student in Industrial Engineering, Seoul National University, South Korea
Advisor : Prof. Sungjoo Lee

Sep 2025 – Present

Collaborative Researcher (Visiting Scholar), Human-Computer Interaction Institute (HCII),

Carnegie Mellon University, USA

Host: Prof. John Zimmerman

Publications

- Kisik Song, Siyeong Yun, Leehee Kim, Sungjoo Lee (2022). Investigating new design concepts based on customer value and patent data: The case of a future mobility door. *Technological Forecasting and Social Change*, *184*, 121963.

- Hyunjin Shin, Sanghyun Park, Leehee Kim, Jinseob Kim, Taeeun Kim, Youngkeun Song, Sungjoo Lee (2024). *The future service scenarios of 6G telecommunications technology*. *Telecommunications Policy*, *48*(2), 102678.
- Leehee Kim & Sungjoo Lee. *Comparing Patent Network Methods for Extracting Technology Intelligence*.
  - Manuscript under revision at *IEEE Transactions on Engineering Management*.
- Sanghyun Park, Leehee Kim, Doyoung Park, Sungjoo Lee. *Extracting Technology Problem–Solution Pairs from Patents to Overcome Technological Barriers: Tech-Mining with Multi-LLM Applications*.
  - Manuscript under revision at *Technological Forecasting and Social Change.*
- Jinseob Kim, Leehee Kim, Taeeun Kim, Heeyoung Choi, Songhee Yang, Sungjoo Lee. *Extracting market intelligence from trademark data: A text-based framework for analyzing goods and services*.
  - Under review at *Journal of Business Research*.

Conferences

- *Exploring interaction methods between experts and artificial intelligence: A perspective on technology forecasting*, 2024 IEA Conference, Jeju, South Korea
- *Predicting promising technologies using a multi-layered network of country, company, and technology*, Oral Presentation, 2024 INFORMS Annual Meeting, Seattle, United States
- *What patent feature determines a promising patent?*, 2023 R&D Management Conference, Seville, Spain

Experiences

- **ETAS Korea**
  Cybersecurity Team Intern | Jan 2020 – June 2020
  Subsidiary of ETAS GmbH, part of Bosch Group, headquartered in Stuttgart, Germany

Skills and Languages

- Programming: Python
- Languages: Korean (native), English (fluent), Japanese (fluent)