# Inju Lee

Ph.D. Student in Cognitive Psychology

Human Factors Psychology Lab, Seoul National University, Seoul, Republic of Korea

Email: ijlee37@snu.ac.kr Github: github.com/Inju0716

#### **Research Interests**

Empathy, Social Cognition, Social Participation, Computational Psychology, Human-AI Interaction (HAI)

### **Education**

2022 – Present	<b>Ph.D. in Cognitive Psychology</b> Seoul National University, Seoul, Republic of Korea
2020 - 2022	M.A. in Cognitive Psychology Seoul National University, Seoul, Republic of Korea
2016 - 2020	<b>B.S. in Psychology, Summa Cum Laude</b> Sogang University, Seoul, Republic of Korea

### **Publications**

#### **Journal Articles**

- **Lee, I.** & Hahn, S. (2024). On the Relationship Between Mind Perception and Social Support of Chatbots. *Frontiers in Psychology*, *15*, 1282036. doi: 10.3389/fpsyg.2024.1282036.
- Lee, YK., Lee, I., Shin, M., Bae, S., & Hahn, S. (2024). Enhancing Empathic Reasoning of Large Language Models Based on Psychotherapy Models for AI-assisted Social Support. *The Korean Society for Cognitive Science*, *35*(1), 23-48. doi: 10.19066/cogsci.2024.35.1.002.

### **Conference Proceedings**

- Lee, I., & Hahn, S. (2025). How Empathy Promotes Socially Adaptive Behaviors in Interpersonal Conflicts?: An Exploratory Study on the Role of Intention Inference. In *Proceedings of the 47th Annual Meeting of the Cognitive Science Society*.
- Lee, I., Kang, G., Bae, S., Maeng, H., & Hahn, S. (2025). Exploring Digital Phenotypes for Life Satisfaction in Middle-Aged Women. In Jin, S., Kim, J.H., Kong, YK., Park, J., Yun, M.H. (Eds.), Springer Series in Design and Innovation: Vol. 58. *Proceedings of the 22nd Congress of the International Ergonomics Association* (pp. 635-641). Springer. doi: 10.1007/978-981-96-8904-0 83.
- Lee, YK., Jung, Y., Lee, I., Park, J. E., & Hahn, S. (2021). Building a Psychological

Ground Truth Dataset with Empathy and Theory-of-Mind During the COVID-19 Pandemic. In *Proceedings of the 43rd Annual Meeting of the Cognitive Science Society*.

## **Preprints**

- Lee, YK., Lee, I., Shin, M., Bae, S., & Hahn, S. (2023). Chain of Empathy: Enhancing Empathetic Response of Large Language Models Based on Psychotherapy Models. ArXiv. [pdf]
- Lee, YK., Lee, I., Park, J. E., Jung, Y., Kim, J., & Hahn, S. (2021). A Computational Approach to Measure Empathy and Theory-of-Mind from Written Texts. ArXiv. [pdf]

# **Conference Presentations**

- Lee, I. & Hahn, S. (2025). How Empathy Promotes Socially Adaptive Behaviors in Interpersonal Conflicts?: An Exploratory Study on the Role of Intention Inference. The 47th Annual Meeting of the Cognitive Science Society, San Francisco, SF., USA. [Poster Presentation]
- Lee, I., Kang, K., Bae, S., Maeng, H., & Hahn, S. (2024). *Exploring digital phenotypes for life satisfaction in middle-aged women*. The 22nd Triennial Congress of the International Ergonomics Association (IEA). Jeju, Republic of Korea. [Oral Presentation]
- Lee, I. & Hahn, S. (2021). An Exploratory Study of the Relationship between Type of Others and Level of Perspective-Taking during the COVID-19 Pandemic. The Annual Conference of Korean Society for Cognitive Science, Virtual Meeting. [Poster Presentation]
- Lee, YK., Lee, I., Park, J. E., & Hahn, S. (2021). Evaluation of Empathy Detection Performance of Deep Learning Models using Theory-of-Mind levels and COVID-19 Emotion-Diary Corpus. The Annual Conference of Korean Society for Cognitive Science, Virtual Meeting. [Poster Presentation]
- Lee, YK., Jung, Y., Lee, I., Park, J. E., & Hahn, S. (2021). Building a Psychological Ground Truth Dataset with Empathy and Theory-of-Mind During the COVID-19 Pandemic. The 43rd Annual Meeting of the Cognitive Science Society. Virtual Meeting. [Poster Presentation]

# **Research Projects**

2025 - Present	Connecting Forms, Moving Language: Designing a Responsive Multi-Actor Interaction System for Social Network Expansion, <i>National Research Foundation of Korea</i> .
2025 - Present	Development of a Social Competence Enhancement Model for Korean Smart-Aging, <i>National Research Foundation of Korea</i> .

2025 - Present	SKERIC Future Laureates Societal Challenges Programme (theme Artificial Intelligence), Sweden-Korea Education, Research, and Innovation Collaboration (SKERIC).
2022 – 2024	Development of Multidisciplinary Well-Aging Indicators and Digital Application for Menopause Symptom Monitoring of Middle-Aged Women, Convergence-Fusion Research Support Program (by Seoul National University).
2021 – 2022	Smart-Aging Avatars: Research on Intelligent Biofeedback and Visualized Human-AI Interaction Technologies, <i>Convergence-Fusion Research Support Program (by Seoul National University)</i> .
2021 – 2022	SNU Diversity Council 2030 Development Plan Establishment Study, SNU Diversity Council.
2020 – 2022	AI based Online Personal Psychological Monitoring & Management System, <i>Seoul Business Agency</i> .
2020	COVID-19 Psychological-Aid Dataset: Implications of Psychological Theory of Personality, Empathy and Loneliness, <i>Korean Data Agency</i> .

# **Grants and Awards**

<b>Grants</b>	
2023 – 2025	Research Subsidies for Ph.D. Students/Candidates, National Research Foundation of Korea.  (Research Title: A Way to Measure Empathic Accuracy for Computational Approaches)
2021	Social Science Researcher Grant, Seoul National University.  (Research Title: Effect of Mind Perception in Chatbot on User's Perception about Chatbot's Empathic Expression)
<b>Awards</b>	
2021	Academic Excellent Scholarship, Seoul National University.
2020	Summa Cum Laude, Sogang University.
2018 Fall	Academic Achievement Excellence Award, Sogang University.
2016 Spring	Academic Excellent Scholarship, Sogang University.

# Talks and Workshops

**Talks** 

2021 Context-based Conversation Comprehension using RASA, AppCog

(Applied Cognition), Human Factors Psychology Lab, Seoul

National University. [link]

Workshops

2025 A Data-driven Approach to Identifying Critical Indicators for

Variables of Interest, 2025 SNUIPS AI Workshop, Seoul National

University. [<u>link</u>]

2021 How to make a customized chatbot for human-AI interaction

studies?, Open Lab Workshop, Human Factors Psychology Lab,

Seoul National University. [link]

# **Academic Service and Work Experience**

2025 Symposium Co-Organizer

Inclusive AI Symposium (co-organized by Seoul National

University, Lund University, and SKERIC)

2025 Fall **Teaching Assistant** 

Student-Led Seminar: Living and Learning, Seoul National

University

2022 – Present **Teaching Assistant** 

Psychology of Emotion and Behavior, Korean Mass Open Online

Course (K-MOOC)

2022 Reviewer

Korean Journal of Cognitive Science

2019 – 2020 Research Assistant & Lab Manager

Human Factors Psychology Lab, Seoul National University

#### **Skills**

Programming Language Python (Advanced), C (Basic), C++ (Basic), SQL (Basic)

Statistical Operation R (Advanced), SAS (Intermediate)

Chatbot Framework Chatfuel, Dialogflow, RASA (Project-Level Experience)

LLM/ML Framework LangChain, PyTorch, TensorFlow (Project-Level Experience)