# **Yoonwon Jung**

Curriculum Vitae

1, Gwanak-ro, Gwanak-gu, Seoul, Republic of Korea 08826 | <a href="mailto:ywjung@snu.ac.kr">ywjung@snu.ac.kr</a>

# **RESEARCH INTERESTS**

Cognitive Science, Affective Psychology, Computational Linguistics, Human-Computer Interaction

# **EDUCATION**

**Ph.D.** Cognitive Science *University of California San Diego*Advisor: Benjamin Bergen, Ph.D.

2023 – 2028 (Expected) California, USA

M.A. Cognitive Psychology

2020 – 2022 Seoul, Korea

Seoul National University

Advisor: Sowon Hahn, Ph.D.

Thesis title: "Social robots as companions for lonely hearts: The role of anthropomorphism and robot appearances"

**B.A.** Psychology Seoul National University Summa Cum Laude 2016 – 2020 Seoul, Korea

Departmental First-Class Distinction (1/31)

**Exchange Student** 

Fall 2018

Boston College Massachusetts, USA

# **PUBLICATIONS**

# **Journal Articles**

Kim, JW., **Jung, Y**., Lee, YK., & Hahn, S. (2023). The relationship between perspective-taking ability and psychological and emotional characteristics observed in a large emotion diary dataset: A cluster analysis. *Korean Journal of Health Psychology*, 28(1), 1-25, 10.17315/kjhp.2023.28.1.001 [pdf].

# **Conference Proceedings**

- **Jung, Y.**, & Hahn, S. (2023). Social robots as companions for lonely hearts: The role of anthropomorphism and robot appearance. *32nd IEEE International Conference on Robot and Human Interactive Communication (RO-MAN 2023)*. [pdf]
- Lee YK., **Jung, Y.**, Kang, K., & Hahn, S. (2023). Developing Social Robots with Empathetic Non-Verbal Cues Using Large Language Models. Late Breaking Report for presentation at *the 32nd IEEE International Conference on Robot and Human Interactive Communication (RO-MAN 2023)*.
- **Jung, Y.**, Lee, YK., & Hahn, S. (2021). Web-scraping the Expression of Loneliness during COVID-19. *Proceedings of the Annual Meeting of the Cognitive Science Society*, 43. <u>https://escholarship.org/uc/item/53m546pq</u>.
- Lee, YK., **Jung, Y.**, Lee, I., Park, JE., & Hahn, S. (2021). Building a Psychological Ground Truth Dataset with Empathy and Theory-of-Mind During the COVID-19 Pandemic. *Proceedings of the Annual Meeting of the Cognitive Science Society*, 43. <a href="https://escholarship.org/uc/item/950900w7">https://escholarship.org/uc/item/950900w7</a>.

# **Unpublished Manuscripts**

- **Jung, Y.**, Lee, Y & Hahn, S. Age and gender differences in loneliness during the COVID-19: Analyses on large cross-sectional surveys and emotion diaries [Under Review]. PsyArXiv. [preprint]
- Lee, YK., Lee, I., Park, J. E., **Jung, Y.**, Kim, J., & Hahn, S. A Computational Approach to Measure Empathy and Theory-of-Mind from Written Texts [Unpublished manuscript]. arXiv:2108.11810. [preprint]

#### CONFERENCE PRESENTATIONS

## **Oral Presentations**

**Jung, Y.**, & Hahn, S. (2023). Social robots as companions for lonely hearts: The role of anthropomorphism and robot appearance. *32nd IEEE International Conference on Robot and Human Interactive Communication (RO-MAN 2023)*. Busan, Republic of Korea.

#### **Poster Presentations**

- Lee YK., **Jung, Y.**, Kang, K., & Hahn, S. (2023). Developing Social Robots with Empathetic Non-Verbal Cues Using Large Language Models. The 32nd IEEE International Conference on Robot and Human Interactive Communication (RO-MAN 2023). Busan, Republic of Korea.
- **Jung, Y.**, Jung, S., Hahn, S. (2023). The effect of emotional clarity on mental health: the role of emotion regulation. *The 13<sup>th</sup> International Conference on Cognitive Science*. Seoul, Republic of Korea.
- **Jung, Y.**, Lee, YK., & Hahn, S. (2021). Age and gender differences in loneliness during the COVID-19: Analyses on large cross-sectional surveys and emotion diaries. *The Annual Conference of Korean Cognitive Science Society*, Seoul, Republic of Korea (Virtual). [pdf]
- **Jung, Y.**, Lee, YK., & Hahn, S. (2021). Web-scraping the Expression of Loneliness during COVID-19. *The 42<sup>nd</sup> Annual Meeting of the Cognitive Science Society*, Vienna, Austria (Virtual). [pdf]
- Lee, YK., **Jung, Y.**, Lee, I., Park, JE., & Hahn, S. (2021). Building a Psychological Ground Truth Dataset with Empathy and Theory-of-Mind During the COVID-19 Pandemic. *The 42<sup>nd</sup> Annual Meeting of the Cognitive Science Society*, Vienna, Austria (Virtual).

# TALKS AND WORKSHOPS

- Social Robots as Companions for Lonely Hearts: The Role of Anthropomorphism and Robot Appearance, Cogsci 2023 Seoul Local Meetup. July 2023. [link]
- **Web-scraping & Topic Models,** Open Lab Talk hosted by Human Factors Psychology Lab (Seoul National University). August 2021. [link]
- **Loneliness & Web-scraping**, Open Lab Talk hosted by Human Factors Psychology Lab (Seoul National University). January 2021. [link]

# AWARDS AND SCHOLARSHIPS

- **Scholarship for Overseas Ph.D. student,** *KFAS (Korea Foundation for Advanced Studies).* Aug. 2023 Present.
- **Scholarship for Oversears Ph.D. program applicant,** KFAS (Korea Foundation for Advanced Studies). Aug. 2022 Jul. 2023.
- Graduate Scholarship for Academic Excellence, Seoul National University, Spring 2021.
- Summa Cum Laude, Departmental First-Class Distinction(1/31), Seoul National University. 2020.

Last modified: July 29, 2023

**Undergraduate Scholarship for Academic Excellence**, *Yongin Human Resources Development Foundation*. 2016, 2017, 2019 (Annually Awarded).

**Undergraduate Scholarship for Academic Excellence,** *Seoul National University.* Spring 2016, Fall 2016, Spring 2017, Spring 2018.

## **FUNDING AND GRANTS**

SNU Social Sciences Research Grant for Graduate Students, Seoul National University. 2021.

Title: "The effect of robot appearance on the relationship between loneliness and anthropomorphism: The difference between state and trait loneliness."

Grant amount: 3,000,000 won (\$3600)

Social Science Research Grant for Undergraduates, Seoul National University. 2019.

Title: "The effect of extraversion on vulnerability to loneliness: Moderating effects of basal loneliness level."

Grant amount: 1,500,000 won (\$1800)

Special Program for Exploration on Value and Practice, Seoul National University. 2019.

Title: "Relationship-seeking of Korean young adults: On the difference between evaluating self

and others."

Grant amount: 3,000,000 won (\$3600)

## GRADUATE RESEARCH EXPERIENCE

Human Factors Psychology Lab (PI: Sowon Hahn, Ph.D.), Seoul National University. 2020 - 2023

i. Launched and led three collaborative projects and produced papers for publication

The effect of promoting higher emotional granularity on neuroticism: the mediating effect of emotion regulation. Jul. 2022 – Present.

Age and gender differences in loneliness during COVID-19: Analyses on large cross-sectional surveys and emotion diaries. Apr. 2021 – Aug. 2022.

Web-scraping the Expression of Loneliness during COVID-19. Nov. 2020 – Jul. 2021.

ii. Participated in four funded research projects

Smart-Aging Avatars: Research on Intelligent Biofeedback and Visualized Human-AI Interaction Technologies, Seoul National University. Sep. 2021 – Aug. 2022.

• Designed the pilot study on giving AI-generated feedback on walking posture and speed using CLOVA AI voice generator, gaining insight on user-preferred feedback

**SNU Diversity Council 2030 Development Plan Establishment Study,** *Seoul National University Diversity Council*. Oct. 2021 – Feb. 2022.

 Evaluated shortcomings of current diversity policies and investigated examples of the strong policies, laying the foundations for designing the future 10-year diversity policy of Seoul National University

**AI-based Online Personal Psychological Monitoring & Management System.** *Seoul Business Agency*, Dec. 2020 – Feb. 2022.

- Developed CBT (Cognitive-Behavioral Therapy) and RT (Reality Therapy) based humanchatbot dialogue flows for the psychologically monitoring chatbot
- Built approx. 1000 training datapoints for the chatbot

**COVID-19 Psychological-Aid Dataset: Implications of Psychological Theory of Personality, Empathy, and Loneliness.** *Kdata*, Sep. 2020 – Dec. 2020.

• Designed the dataset to measure Koreans' psychological state during COVID-19

Last modified: July 29, 2023

- Designed and led 8 workshop sessions to instruct the data labelers on how to label theory-of-mind levels from given text data
- Inspected the labeled data from approx. 8000 text entries to ensure the accuracy of theory-of-mind labels

#### UNDERGRADUATE RESEARCH EXPERIENCE

Human Factors Psychology Lab (PI: Sowon Hahn, Ph.D.), Seoul National University. 2019 - 2020.

- Conducted literature reviews on factors affecting trust in Human-AI interactions
- Preprocessed data for statistical analyses using Excel and R

Social Psychology Lab (PI: Incheol Choi, Ph.D.), Seoul National University. 2020.

• Conducted literature reviews on the relationship among interest, enjoyment, and competence

# TEACHING EXPERIENCE

[Teaching Assistant] Introduction to Psychology (English), Seoul National University. Spring 2021.

- Led weekly group discussions and workshops (virtual)
- Graded essays and exam responses of 80 students

## **WORK EXPERIENCE**

[Editorial Secretary] Korean Journal of Cognitive Science, The Korean Society for Cognitive Science, Jan. 2022 – Jan. 2023.

• Managed the journal's review and quarterly publication processes

[Intern] C.lab (Startup Incubation Program), Samsung Electronics. Jun. 2019 – Aug. 2019.

- Worked for HAXBY (AI-based math learning assisting application) team
  - O Designed the user experience (UX) of application pages providing math assistance and user analysis results for better usability for both students and teachers
  - Assisted in-person user test with a prototype and analyzed the limitations of the current functions and designs of the app

## **SKILLS**

Language

**Korean** Native proficiency

**English** Full professional proficiency (GRE: V163/Q170/W4.5)

**Programming & Data Analysis** 

**Python** Preprocessing (pandas, numpy, nltk, spaCy), Web-scraping (BeautifulSoup, selenium,

requests), Machine learning (gensim, pytorch), Visualization (matplotlib)

**R** Data Preprocessing (dplyr), Statistical analyses (psych, sem), Visualization (ggplot2)

## REFERENCES

Benjamin Bergen, Ph.D. Ph.D. Advisor bkbergen@ucsd.edu

Department of Cognitive Science, University of California San Diego, California, USA.

Sowon Hahn, Ph.D. Master's Advisor <u>swhahn@snu.ac.kr</u>