

Ellen Da-eun Lee, Ph.D.

📍 350 George St. New Haven, CT, USA, 06511
✉ da-eun.lee@yale.edu
in linkedin.com/in/daeun-lee12

☎ (230)-589-4440
🔗 github.com/leedaeuni
🏠 leedaeuni.github.io

Professional Experience

2025 –	Yale School of Medicine Postdoctoral Associate, Yale Child Study Center	New Haven, CT
Sep. – Dec. 2024	Sungkyunkwan University Postdoctoral Fellow, The Center for Multimedia Intelligence	South Korea
Oct. – Mar. 2024	University of South Florida Visiting Scholar, Dept. of Computer Science & Engineering Host: Prof. Seungbae Kim	Tampa, FL
Jul. – Oct. 2022	RaonData Research Intern, Speech Processing	South Korea
2018 – 2019	Korea Psychological Autopsy Center Data Scientist, R&D Planning Team	South Korea

Education

2020 – 2024	Sungkyunkwan University Ph.D., Applied Artificial Intelligence Advisor: Prof. Jinyoun Han <i>Predicting Suicidality with Explainable Deep Learning Models</i>	South Korea
2012 – 2017	Sookmyung Women's University B.A., Social Psychology	South Korea

Publications

(* = (co-) corresponding author, ** = equal contribution)

—Under Review & Work in Progress

- [U-1] **Toward a Mental Health Counseling System: A Bibliometric and Qualitative Analysis of Dialogue Systems for Mental Health**
You, D.** , Lee, D.** , Yang, M., An, J., & Han, J.*
JMIR, under review - Journal of Medical Internet Research
- [U-2] **Predicting Future Suicidality in Bipolar and Major Depressive Disorders on Social Media**
Jeon, H.** , Lee, D.** , Son, S., An, J., & Han, J.*
Work in Progress

—Conference

- [C-1] **Show Your Mind: Unveiling User Experience on an AI-based Mental Health Assessment System with Symptom-based Evidences**
Won, H.** , Kang, M.** , Kim, M.** , Lee, D., Choi, D., & Han, J.*
CHI EA 2025 -Extended Abstracts of the CHI Conference on Human Factors in Computing Systems
- [C-2] **Gesture-Aware Zero-Shot Speech Recognition for Patients with Language Disorders** [PDF]
Kim, S.** , Lee, D.** , Stark, B., & Han, J.*
GenAI4Health-AAAI 25 Workshop
- [C-3] **Counselor-AI Collaborative Transcription and Editing System for Child Counseling Analysis** [PDF]
Lee, H., Lee, J., Yang, M., Lee, D., Han, Y., & Han, J.*
ACM IUI 2025 - The ACM Conference on Intelligent User Interfaces 2025
- [C-4] **Multilingual Mild Cognitive Impairment Detection with Multimodal Approach** [PDF]
Barrera-Altuna, B., Lee, D., Zarnaz, Z., Han, J., & Kim, S.*
Interspeech 2024
- [C-5] **Detecting Bipolar Disorder from Misdiagnosed Major Depressive Disorder with Mood-Aware Multi-Task Learning** [PDF] [DATA & CODE] [VIDEO]
Lee, D.** , Jeon, H**., Son, S., Park, C., An, J., Kim, S., & Han, J.*
NAACL 2024 - The North American Chapter of the ACL 2024
- [C-6] **Fighting against Fake News on Newly-Emerging Crisis: A Case Study of COVID-19** [PDF] [DATA & CODE]
Yang, M.** , Park, C.** , Kang, J., Lee, D., Choi, D., & Han, J.*
The Web 2024 - The ACM Web Conference 2024 (Short paper)
- [C-7] **A Dual-Prompting for Interpretable Mental Health Language Models** [PDF] [VIDEO]
Jeon, H.** , You, D.** , Lee, D., Son, S., Kim, S., & Han, J.*
CLPsych 2024 - The 9th Workshop on Computational Linguistics & Clinical Psychology
- [C-8] **Learning Co-Speech Gesture for Multimodal Aphasia Type Detection** [PDF] [CODE] [VIDEO]
Lee, D.** , Son, S.** , Jeon, H., Kim, S., & Han, J.*
EMNLP 2023 - The 2023 Conference on Empirical Methods in Natural Language Processing
- [C-9] **Towards Suicide Prevention from Bipolar Disorder with Temporal Symptom-Aware Multitask Learning** [PDF] [DATA & CODE] [VIDEO]
Lee, D., Son, S., Jeon, H., Kim, S., & Han, J.*
ACM KDD 2023 - The 29th ACM SIGKDD International Conference on Knowledge Discovery & Data Mining
- [C-10] **Detecting Suicidality with a Contextual Graph Neural Network** [PDF] [DATA & CODE]
Lee, D., Kang, M., Kim, M., & Han, J.*
CLPsych 2022 - The 8th Workshop on Computational Linguistics & Clinical Psychology
- [C-11] **COVID-19 Korean fake news detection using named entity and user repropagation information** [PDF]
Park, C., Kang, J., Lee, D., Lee, M. & Han** , Jinyoung
HCLT 2021 - The 33rd Annual Conference on Human and Cognitive Language Technology

[C-12] **Cross-Lingual Suicidal-Oriented Word Embedding toward Suicide Prevention** [PDF] [DATA & CODE] [VIDEO]

Lee, D., Park, S., Kang, J., Choi, D., & Han, J.*

EMNLP Findings 2020 - The 2020 Conference on Empirical Methods in Natural Language Processing Findings

— **Journal**

[J-1] **Detecting depression on video logs using audiovisual features** [PDF]

Min, K.**, Yoon, J.**, Kang, M., Lee, D., Park, E., & Han, J.*

HSSComms 2023 - Humanities & Social Sciences Communications 2023, 10, 788 (SSCI, JCR 2022 IF = 3.5)

[J-2] **Machine learning for mental health in social media: bibliometric study** [PDF]

Kim, J., Lee, D., Park, E.*

JMIR 2021 - Journal of Medical Internet Research 2023, 23(3), e24870(SCIE, JCR 2019 IF=5.034, Q1 in Medical Informatics)

Patents

[P-1] **Appratus for Predicting Aphasia Type and Method Thereof**

Inventor: Han, J.*, Lee, D., Son, S., & Jeon, H.

Application No.: 10-2024-0060023

Filing Date: 2024-05-07

Republic of Korea

[P-2] **Appratus for Predicting Future Suicide Risk and Method Thereof**

Inventor: Han, J.*, Lee, D., Son, S., & Jeon, H.

Application No.: 10-2024-0056538

Filing Date: 2024-04-29

Republic of Korea

Research Projects

[R-1] **NRF International Mobility Program 2023, MIST¹ and NRF²**

- Research Associate (*in Charge*)
- Developing AI models for detecting Dementia using speech data
- Collaborating with University of South Florida (USF)
- Published 1 conference articles as a first author

Oct. 2023 - Sep.2024

[R-2] **A Clinical Decision Support System for Retinal Disease Detection with Explainable AI, NRF²**

- Research Associate
- Analyzing image segmentation techniques on retinal disease detection

Mar. 2023 - Feb. 2027

[R-3] **Developing Deep learning Models and Korean Datasets for Detecting Suicide Risk, NRF²**

- Research Associate (*in Charge*)
- Constructed novel Korean social media datasets, and developed suicide risk detection models
- Published 2 conference articles as a first author

May. 2022 - Apr. 2024

- [R-4] **Developing Artificial Intelligence Application Models and Constructing Dataset for solving social issues, *ETRI*³**
• Research Associate (*in Charge*) Jun. 2021 - Aug. 2021
• Analyzed and constructed mental health related Q&A dataset
• Implemented web application using Flask and uploaded project tutorial video
• Published 1 conference article as a first author
- [R-5] **Developing a Model for Detecting Fake News on COVID-19, *ETRI*³**
• Research Associate Jul. 2020 - Nov. 2020
• Analyzed a social network on YouTube and developed a COVID-19 fake news detection model
• Published 1 journal article as a third author

****Sponsor**

- 1 MIST: Ministry of Science and ICT, The government of the Republic of Korea
- 2 NRF : The National Research Foundation of South Korea
- 3 ETRI: Electronics and Telecommunications Research Institute, South Korea

Honors & Awards

- Best Researcher Award** Aug. 2024
• Dept. of Applied AI, Sungkyunkwan University
- Best Researcher Award** Jan. 2024
• Dept. of Applied AI, Sungkyunkwan University
- Scholarship for Korea-U.S. Research program (\$1,300)** Jul. 2023
• National Research Foundation of Korea (NRF) funded by the Ministry of Science & ICT
• Supported for being one of the 10 elite young female STEM researchers.
- SIGKDD '23 Student Travel Award (\$800)** Aug. 2023
• The 29th ACM SIGKDD International Conference on Knowledge Discovery & Data Mining
- Graduate Scholarship (\$22,000; 1/2 Tuition)** 2020 - 2023
• Sungkyunkwan University

Services

Reviewer

- ACL '24 / CLPsych '23 / PKDD '24 / EMNLP '24 / CIKM '24

Volunteer

- ACM KDD '23 / EMNLP '23

Teaching Fellow

Teaching Assistant

Sungkyunkwan University, Seoul, South Korea

- DIM5004: Interactive Graph Mining, Graduate Course Spring 2024
- DAI5019: Graph Mining, Graduate Course Fall 2022
- AAI3005: Data Mining, Undergraduate Course Spring 2021
- AAI3006: Machine Learning, Undergraduate Course Spring 2021
- DAI5002: AI Programming, Graduate Course Fall 2020
- SWE2022: Intro to Programming, Undergraduate Course Fall 2020

Directed Students

Sungkyunkwan University, Seoul, South Korea

- Undergraduate Research Program, Tutor
 - Machine-Generated Text Detection
 - Mental Status Detection

Fall 2023
Summer 2021

University of South Florida, Tampa, USA

- Undergraduate Research Tutor
 - Speech-Based Cognitive Assessment in Chinese and English

Spring 2024

Talks & Panels

Detecting Bipolar Disorder from Misdiagnosed Major Depressive Disorder with Mood-Aware Multi-Task Learning Nov. 2024

- Data Science for Mental Health (DS4MH) @ The Alan Turing Institute
- [\[LINK\]](#)

Graph Neural Network-based Diagnosis Prediction Apr. 2024

- Dept. of Applied AI, SKKU

Learning Co-Speech Gesture for Multimodal Aphasia Type Detection Mar. 2024

- Global and National Security Institute (GNSI), USF

Detecting Suicidality in Social Media Using Deep Learning Oct. 2023

- Institute for Artificial Intelligence + X, USF

Graph Neural Network-based Diagnosis Prediction Oct. 2023

- Dept. of Applied AI, SKKU

Detecting Suicidality in Social Media Using Deep Learning Sep. 2023

- Dept. of Applied AI, SKKU

Towards Suicide Prevention from Bipolar Disorder with Temporal Symptom-Aware Multitask Learning *[Best Presenter Award]* Sep. 2023

- AI Colloquium 2023, SKKU

Artificial Intelligence & Mental Health Aug. 2023

- Invited Talk at Doonchon Highschool, South Korea

Cross-Lingual Suicidal-Oriented Word Embedding toward Suicide Prevention Nov. 2021

- AI Colloquium 2021, SKKU

References

Prof. Christine Cha (e-mail: christine.cha@yale.edu)

- Associate Professor
- Yale School of Medicine, New Haven, CT, USA

Prof. Jinyoung Han (e-mail: jinyoungghan@skku.edu)

- Associate Professor
- Department of Applied Artificial Intelligence, Sungkyunkwan University, Seoul, Republic of Korea

Prof. Seungbae Kim (e-mail: seungbae@usf.edu)

- Assistant Professor
- Computer Science and Engineering Department, University of South Florida, Tampa, FL, USA

Prof. Daejin Choi (e-mail: djchoi@inu.ac.kr)

- Assistant Professor
- Artificial Intelligence Department, Ewha Womans University, Seoul, Republic of Korea