Yewon Kim

RESEARCH INTERESTS

Human-AI Interaction, Creativity Support, Music AI, Writing with AI

EDUCATION

Korea Advanced Institute of Science and Technology (KAIST) Ph.D. in Electrical Engineering Advisor: Sung-Ju Lee	Mar. 2024 - Present Daejeon, Korea
Korea Advanced Institute of Science and Technology (KAIST) M.S. in Electrical Engineering Advisor: Sung-Ju Lee	<i>Mar.</i> 2022 - Feb. 2024 Daejeon, Korea
Korea Advanced Institute of Science and Technology (KAIST) B.S. in Electrical Engineering Major GPA of 4.02/4.3 Graduated with Honors	<i>Mar.</i> 2017 - Feb. 2022 Daejeon, Korea
Stanford University Undergraduate Summer Visitor Selected Courses: CS221 Artificial Intelligence, CS229 Machine Learning GPA of 3.87/4.3	<i>Jun.</i> 2019 - Aug. 2019 Stanford, CA

PUBLICATIONS

(P: Preprint, C: Conference&Journal, W: Workshop&Demos, *: Equal contribution, †: Equal senior role)

[P2] AMUSE: Human-AI Collaborative Songwriting with Multimodal Inspirations

Yewon Kim, Sung-Ju Lee, Chris Donahue Under Review at CHI 2025

- [P1] How Non-native English Speakers Use, Assess, and Select AI-Generated Paraphrases with Information Aids **Yewon Kim**, Thanh-Long V. Le, Donghwi Kim, Mina Lee[†], Sung-Ju Lee[†]
 Preprint
- [W2] Hookpad Aria: A Copilot for Songwriters

Chris Dohanue, Shih-Lun Wu, **Yewon Kim**, Dave Carlton, Ryan Miyakawa, John Thickstun International Society for Music Information Retrieval (ISMIR) Late Breaking Demos 2024

- [C5] A Design Space for Intelligent and Interactive Writing Assistants
 - Mina Lee*, Katy Gero*, John Joon Young Chung* et al. (30+ authors) §4.2 User: Katy Gero, **Yewon Kim**, Senjuti Dutta, Lila Shroff, Disha Shrivastava, John Joon Young Chung, Eugenia H. Rho Conference on Human Factors in Computing Systems (CHI) 2024
- [W1] Towards Explainable AI Writing Assistants for Non-native English Speakers

Yewon Kim, Mina Lee, Donghwi Kim, Sung-Ju Lee CHI 2023 Workshop on Intelligent and Interactive Writing Assistants (In2Writing)

- [C4] SoTTA: Robust Test-Time Adaptation on Noisy Data Streams
 Taesik Gong*, **Yewon Kim***, Taeckyung Lee*, Sorn Chottananurak, Sung-Ju Lee
 - Conference on Neural Information Processing Systems (NeurIPS) 2023
- [C3] DAPPER: Label-Free Performance Estimation after Personalization for Heterogeneous Mobile Sensing Taesik Gong, **Yewon Kim**, Adiba Orzikulova, Yunxin Liu, Sung Ju Hwang, Jinwoo Shin, Sung-Ju Lee Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT) 2023

[C2] Tailoring Interactions: Exploring the Opportune Moment for Remote Computer-mediated Interactions with Home-alone Dogs

Yewon Kim, Taesik Gong, Sung-Ju Lee

Extended Abstracts of ACM CHI Conference on Human Factors in Computing Systems (CHI EA) 2023

[C1] NOTE: Robust Continual Test-time Adaptation Against Temporal Correlation

Taesik Gong, Jongheon Jeong, Taewon Kim, Yewon Kim, Jinwoo Shin, Sung-Ju Lee

Conference on Neural Information Processing Systems (NeurIPS) 2022

🙎 Qualcomm Innovation Fellowship Finalist

RESEARCH EXPERIENCE

Iul. 2020 - Present KAIST Networking and Mobile Systems Lab Undergraduate Intern and Graduate Student, Advised by Dr. Sung-Ju Lee. Daejeon, Korea Research on AI writing assistants for non-native English speakers. (Co-advised by Dr. Mina Lee) [W1, P1, C5] Research on domain adaptation frameworks in real-world data streams. (Co-advised by Dr. Taesik Gong) [C1, C3, C4]Research on computer-mediated interactions with domestic dogs. (Co-advised by Dr. Taesik Gong) [C2] **CMU Generative Creativity Lab** Apr. 2024 - Sep. 2024 Visiting Student Researcher, Advised by Chris Donahue. Pittsburgh, PA, USA Research on creativity support systems for songwriters. [W2, P2] **KAIST Data Mining Lab** Sep. 2019 - Jun. 2020 *Undergraduate Researcher*, Advised by Kijung Shin. Daejeon, Korea Designed and implemented a recommender system for progressively increasing user's level of expertise. KAIST Data Intelligence Lab *Jun.* 2018 - Dec. 2018 *Undergraduate Researcher*, Advised by Steven Euijong Hwang. Daejeon, Korea Implemented labeling functions for detecting lines and curves in industry metal image dataset.

Leadership Mileage Certificate, KAIST

including volunteering and campus activities.

HONORS AND AWARDS	
Special Recognition for Outstanding Reviews CHI 2024	2024
CVPR 2023 Art Gallery Works accepted to CVPR 2023 Art Gallery have been shown as part of a series of looping videos that played on displays throughout the conference.	Apr. 2023
Students with Outstanding Questions, KAIST In recognition of the students who asked challenging and creative questions during lectures. CS592B Sensor Data Science	Jul. 2022
Graduate of the Year Award (Alumni Association Chairperson Prize), KAIST Honor for top 5 (0.7%) out of 695 graduates, who demonstrated outstanding performances in various activities as well as in grades. Awarded at the commencement ceremony.	Feb. 2022
Engineering Innovator Award, College of Engineering, KAIST In recognition of the outstanding engineering accomplishments.	Sep. 2021
Grand Prix Prize in Undergraduate Research Participation (URP) Program, KAIST DAPPER: Training-Free Domain Adaptation Performance Estimation in Mobile Sensing.	Aug. 2021
National Science and Engineering Undergraduate Scholarship Merit-based scholarship awarded by Korea Student Aid Foundation.	Fall 2020
Department Honors Scholarship, KAIST Awarded to top 3 (0.4%) out of 800+ students in School of Electrical Engineering. <i>Salutatorian</i>	Spring 2020
Dean's List, KAIST Awarded to top 3% among 2,900+ students in College of Engineering.	Spring 2020

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Honor for top 3% among 3,600+ students with top achievements in leadership activities

2020

TEACHING EXPERIENCE

Computer Networks (EE323)

Spring 2021, Spring 2022, Spring 2024

Teaching Assistant at KAIST (Instructor: Dr. Sung-Ju Lee)

Data Structures and Algorithms for Electrical Engineering (EE205)

Fall 2023

Teaching Assistant at KAIST (Instructor: Dr. Ian Oakley)

 $\textbf{Programming Structures for Electrical Engineering} \; (EE209)$

Spring 2023

Teaching Assistant at KAIST (Instructor: Dr. Sung-Ju Lee)

Mobile Computing, Sensing, Learning, and Interactions (EE595)

Fall 2022

Head Teaching Assistant at KAIST (Instructor: Dr. Sung-Ju Lee)

SERVICES

Academic Services

• Reviewer: CHI 2024-2025 / MobiCom 2022-2025 / CHI EA 2023-2024 / MobiSys 2021-2024 / INFOCOM 2022

• Student Volunteer: TEI 2022

Outreach and Leadership

• HCI@KAIST Student Steering Committee

Feb. 2022 - Dec. 2022

Organized workshops, talks, and social events for 400+ members in HCI@KAIST community.

• Science Mentoring

May 2018 - Aug. 2018

Organized and led science mentoring classes for 100+ middle school students in rural communities.

• Programming Mentoring

Jan. 2018 - Feb. 2018

Designed and led Scratch class for 30 middle school students in rural communities.

• KAIST Buddy Program

Aug. 2017 - Dec. 2017

Helped four international students adjust to campus life.

INVITED TALKS

Younghoon Internship Program, Younghoon International Middle School

Jul. 2023

The Role of AI in Creative Works

Career Development Program guest lecture, Sangsan High School

Jul. 2022

The Future of AI: How AI Will Shape the World

EXTRACURRICULAR ACTIVITIES

Double bass and violin player in KAIST Orchestra

Mar. 2018 - *Jan.* 2023

Link to selected performances: [link]

Planned and executed social events for 80+ members as an event committee chair.

KAIST Undergraduate Tennis Club

Mar. 2017 - Dec. 2018

Planned and executed social events and KAIST Open tournament as an event committee chair.

KAIST Global Student Volunteers

Sep. 2017 - Aug. 2018

Organized and led volunteer activities for underprivileged students and seniors in Korea.

REFERENCES

Sung-Ju Lee, Endowed Chair Professor at KAIST

Email: profsj@kaist.ac.kr

Mina Lee, Assistant Professor at the University of Chicago

Email: mnlee@cs.uchicago.edu

Chris Donahue, Assistant Professor at Carnegie Mellon University

Email: chrisdonahue@cmu.edu

Taesik Gong, Assistant Professor at UNIST

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