# Youngji Koh

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github.com/youngji-koh

## Education

**Ph.D in School of Computing** Sep. 2021 — Present
KAIST, Daejeon, Republic of Korea
*Interactive Computing Laboratory (Advisor: Dr. Uichin Lee)*

**M.S. in School of Computing** Sep. 2019 — Aug. 2021
KAIST, Daejeon, Republic of Korea
*Software Architecture Laboratory (Advisor: Dr. Sungwon Kang)*

**B.S. in Computer Science and Engineering** Mar. 2015 — Aug. 2019
Ewha Womans University, Seoul, Republic of Korea
*GPA: 4.02/4.30 (Summa Cum Laude)*

## Research Interest

Digital Healthcare, Human-Centered Computing, and Multimodal Sensing for Mental Health and Wellbeing

## Research Experience

**Undergraduate Research Intern** May 2018 — May 2019
*Human-Computer Interaction Laboratory, Ewha Womans University (Advisor: Dr. Uran Oh)*

- Build a touchscreen-based mobile application as a prototype focusing on 2D paintings which plays object-level verbal descriptions upon users' touch to enable people with visual impairments to explore and understand various artworks independently
- Design a mobile application for conflict management between lovers on mobile messenger

## Funded Reserach Projects

**Early Prediction of Complex Diseases and Telemedicine Expansion** Jun. 2025 – Dec. 2025
*Institute for ICT Planning & Evaluation (IITP), Project Manager*

- Developed a comorbidity prediction and management framework leveraging LLM-based patient digital twins and multi-clinician agents

**Prediction and Management of Emotion Workers' Mental Health Risks** Apr. 2022 – Dec. 2025
*Institute for ICT Planning & Evaluation (IITP), Research Assistant*

- Authored a survey paper on stress sensing and intervention technologies

**Proactive Mental Health Prediction and Management in the Smart Home** Sep. 2021 – Oct. 2024
*LG Electronics, Project Manager*

- Developed a multimodal self-reporting smart speaker for in-home mental health monitoring (featured in News)
- Led in-the-wild collection of mobile, wearable, and home IoT data, designed a personal informatics system, and analyzed associations with mental health outcomes
- Built predictive models to evaluate the efficacy of multimodal data in detecting depression and anxiety
- Collaborated on the development and evaluation of a CBT-based counseling robot that provided micro-interventions in a counseling center environment

**Research on Success and Failure Cases of MSA Architectures** Sep. 2020 – Feb. 2021
*Hyundai Card, Research Assistant*

## Publications

***Journal & Conference***

[C6] **Home IoT for Self-tracking Emotional Wellbeing: Behavioral Patterns, Self-Reflection, and Privacy Concerns**
***Youngji Koh**, Chanhee Lee, Eunki Joung, Hyunsoo Lee, Uichin Lee*
In *Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT)* (Espoo, Finland, Oct 14-16, 2025). UbiComp'25. ACM. (top conference)

[C5] **'In That Small Space with Just the Two of Us': User Experiences with Cumpa in a Robotic Counseling Center**
*Chanhee Lee, Eunki Joung, **Youngji Koh**, Esther Kim, Sohwi Son, Sunjung Kwon, and Uichin Lee*
In *Proceedings of the ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW)* (Bergen, Norway, Oct 18-22, 2025). CSCW'25. ACM. (top conference)

[C4] **Exploring Context-Aware Mental Health Self-Tracking Using Multimodal Smart Speakers in Home Environments**
*Jieun Lim*, **Youngji Koh***, Auk Kim, Uichin Lee (*: equal contribution)*
In *Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI)* (Hawaii, USA, May 11-16, 2024), CHI '24. ACM. (top conference)

[C3] **Interrupting for Microlearning: Understanding Perceptions and Interruptibility of Proactive Conversational Microlearning Services**
*Minyeong Kim, Jiwook Lee, **Youngji Koh**, Chanhee Lee, Uichin Lee, Auk Kim*
In *Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI)* (Hawaii, USA, May 11-16, 2024), CHI '24. ACM. (top conference)

[J1] **Deep Learning-based Bug Report Summarization Using Sentence Significance Factors**
***Youngji Koh**, Sungwon Kang, Seonah Lee*
Applied Sciences 2022

[C2] **Bug Report Summarization using Believability Score and Text Ranking**
***Youngji Koh**, Sungwon Kang, Seonah Lee*
International Conference on Artificial Intelligence in Information and Communication (ICAIIC 2021). IEEE.

[C1] **Deep learning based bug report summarization using sentence assessment score**
***Youngji Koh**, Sungwon Kang*
Korea Software Congress (KSC 2020) *Best Paper Award*

***Poster & Workshop***

[W1] **Data Visualization for Mental Health Monitoring in Smart Home Environment: A Case Study**
***Youngji Koh**, Chanhee Lee, Yunhee Ku, Uichin Lee*
IEEE VIS 2023 Workshop on Visual Analytics in Healthcare

[P4] **LV-Linker: Supporting Fine-grained User Interaction Analyses by Linking Smartphone Log and Recorded Video Data**
*Hansoo Lee, Sangwook Lee, **Youngji Koh**, Uichin Lee*
ACM Symposium on User Interface Software and Technology (UIST 2022)

[P3] **Supporting Object-level Exploration of Artworks by Touch for People with Visual Impairments**
*Nahyun Kwon, **Youngji Koh**, Uran Oh*
ACM SIGACCESS Conference on Computers and Accessibility (ASSETS 2019)

[P2] **Analysis of Conflicts in Romantic Relationships on Mobile Messengers**
***Young-Ji Koh**, Hyunggu Jung, Uran Oh*
HCI Korea 2019

[P1] **Real-time Fire Evacuation System based on Indoor Location Tracking and Route Optimization**
***Young-Ji Koh**, Naeun Go, ChaeYoon Kim, SooHee Lee, Sangsoo Park*
Korea Software Congress (KSC 2018) *Student Paper Competition, Merit Award*

## Honors and Awards

**Special Recognition for Outstanding Reviews** Dec 2024
ACM CHI

**Ewha Womans University Scholarship** Spring 2018
Merit-based scholarship

## Teaching Experience

**Teaching Assistant, KAIST** Fall 2021, Spring 2023
CS492 Data Visualization

**Teaching Assistant, KAIST** Spring 2020
CS204 Discrete Mathematics

## Community Service

**HCI@KAIST** 2024, 2025
Student Steering Committee

## Academic Service

**Reviewer**
IEEE Transactions on Computational Social Systems 2025
UbiComp/ISWC Notes and Briefs 2025
CHI 2025