

# Jeonghyun Kim

✉ jeonghyun.kim@kaist.ac.kr | 📄 github.com/Jeonghyun109 | 🔗 linkedin.com/in/jeonghyun109/ | 🎓 Jeonghyun Kim

## Profile

MS student at the Interactive Computing Lab, KAIST, supervised by Prof. Uichin Lee. Research stress management systems that improve self-awareness through wearable and mobile sensing. Interested in user-centered design, HCI, and well-being technologies.

## Research Interests

Human-Computer Interaction (HCI), Interactive Systems, Mental Health, and Personalized Computing.

## Education

### Korea Advanced Institute of Science & Technology (KAIST)

M.S. School of Computing

- Advisor: Prof.Uichin Lee, Interactive Computing Lab (ICLab)

Daejeon, Korea

Feb 2024–present

### Korea Advanced Institute of Science & Technology (KAIST)

B.S. School of Computing, Minor in Electrical Engineering

Daejeon, Korea

Feb 2018–Feb 2024

## Publications

(J: Journal, C: Conference)

### J.1 Affectstream: Kafka-Based Real-Time Affect Monitoring System Using Wearable Sensors

Jeonghyun Kim, Duri Lee, and Uichin Lee.

SoftwareX, Vol. 31, 102325, 2025.

### C.1 HateBuffer: Safeguarding Content Moderators' Mental Well-Being through Hate Speech Content Modification

Subin Park\*, Jeonghyun Kim\*, Jeanne Choi, Joseph Seering, Uichin Lee, and Sung-Ju Lee.

Proceedings of the ACM on Human-Computer Interaction (PACM HCI), Vol. 9, Issue 7, ACM CSCW '25.

## Experience

### KAIST Interactive Computing Lab

Graduate Student, Advised by Uichin Lee

- Research on stress management systems that enhance self-awareness through wearable and mobile sensing
- Research a data streaming platform to support real-time affect monitoring using wearable sensor data
- Advisor: Prof.Uichin Lee, KAIST School of Science

Daejeon, Korea

Feb 2024 - Present

### KAIST HCI Lab

Undergraduate Individual Research

- Research on improving issues caused by the lack of haptic feedback in AR environments
  - Studied the effectiveness of haptic feedback in GUI button interactions within AR environments
  - Explored interaction design of depth-funneling gloves in AR environments
  - Researched enhancing haptic feedback of depth-funneling gloves
- Advisor: Prof.Geehyuk Lee, KAIST School of Computing

Daejeon, Korea

June 2021 - Dec 2021

### ReDWit, Development Team

Internship

- Contributed to the GOONO 3.0 update, an electronic lab notebook service
- Integrated React Query into the project

Daejeon, Korea

Sep,2022 – Dec,2022

### ReDWit, Development Team

CUop Internship

- Developed an in-house attendance management web service
- Redesigned and improved a Slack bot
- Implemented update features and fixed bugs for the electronic lab notebook service "GOONO"

Daejeon, Korea

Dec,2021 – Feb,2022

# Projects

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## Development of Human Digital Technologies for Prediction and Management of Emotion Worker’s Mental Health Risks

Institute for Information & communication Technology Planning & evaluation (IITP) Feb 2024 – Present

- Developing and validating an interactive human digital twin technology that simulates and synchronizes the mechanisms of individual stress risk factors in a virtual environment, in order to provide personalized stress risk management solutions for mitigating mental health risks caused by emotional labor.

## Development of a Data Streaming Platform to Support Real-time Affect Monitoring Using Wearable Sensor Data

Institute for Information & communication Technology Planning & evaluation (IITP) Feb 2024 – Aug 2025

- Developing a Kafka-based real-time affect monitoring system using wearable sensors.

## Designing Tools for Mental Health Protection in Content Moderation

CS584 Human-Computer Interaction Feb 2024 – Oct 2024

- Understanding the Impact of Mitigated Text on Emotional Burden and Decision-Making in Text Moderation.

## KAIST Mad Camp

Hackathon program for intensive programming and startup Daejeon, Korea  
June 2020 – Aug 2020

- Developed a mobile app that provides contact, gallery, and weather information, [github](#)
  - Android Studio, Java
- Built a mobile SNS app inspired by Cyworld, [github](#)
  - Android Studio, Java, MySQL, node.js
- Created a movie search website categorizing films by continent, [github](#)
  - HTML, MySQL, node.js
- Developed a website introducing vegan restaurants in Korea, [github](#)
  - React, MongoDB, node.js

# Skills

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Programming	Python, Java, JavaScript, TypeScript, C/C++, C#
Software & Frameworks	React.js, Node.js, Next.js, Android Studio, Pytorch, Unity3D, MongoDB, MySQL, Pytorch, Numpy, Scikit-learn
DevOps	Docker, Kubernetes, AWS, Git
Design & Research	Figma, Qualitative & quantitative analysis for user study

# Teaching Experience

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## 2025 Winter Internship Program in Interactive Computing Lab KAIST ICLab

Teaching Assistant for Internship Program:

Topic 1: On-device Context Sensing using Smart Watches & Topic 2: Mobile Data Collection System

- 2025 Winter

## Teaching Assistant for CS206 Data Structure course KAIST SoC

Assisted in preparing and grading assignments, and supported students’ understanding of fundamental data structures and algorithms in Java.

- 2024 Spring, 2024 Fall, 2025 Spring, 2025 Fall

# Awards & Honors

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## Graduate Research Fellowship for Master’ s Student NRF

A national fellowship awarded by the NRF to foster Master’s students’ early research capabilities and academic excellence 2024-2025

## Outstanding TA Award KAIST

Teaching assistant for CS206 Data Structure course 2025.07

## Outstanding TA Award KAIST

Teaching assistant for CS206 Data Structure course 2024.08

**Lim Mi-sook Scholarship**

A scholarship that supports KAIST School of Computing female students who demonstrate outstanding leadership

KAIST

2023.11

**National Science and Engineering Scholarship**

A government-funded program in South Korea for outstanding students entering science and engineering fields

KAIST

2018.06

**KAIST Presidential Fellowship**

A selective KAIST program supporting top undergraduates with academic excellence and leadership potential to become global science and technology leaders

KAIST

2018-2023