Kwangyoung Lee

291, Daehak-ro, Yuseong-gu, Daejeon,
Republic of Korea 34141
Email: kwangyoung@kaist.ac.kr
Phone Number: (+82) 10-7347-3676

Research Interest

Human-Computer Interaction, Human-Centered Design, Personal Informatics, Data-Driven Design, Mental Well-being, Digital Health

Education

Korea Advanced Institute of Science and Technology (KAIST), Daejeon
Ph.D / Industrial Design (Sep. 2022 - Aug. 2026 expected)

Ulsan National Institute of Science and Technology (UNIST), Ulsan
Professional Master of Design-Engineering (Mar. 2016 - Feb. 2018)

- Thesis: Designing Toolkits for Self-Tracking and Self-Intervention to Improve Mental Health
- Advisor: Professor Hwajung Hong

Korea Advanced Institute of Science and Technology (KAIST), Daejeon
Bachelor of Science / Industrial Design (Feb. 2010 - Feb. 2016)

Research Experience

Stress Management by Developing Digital Twins (@ KAIST)
Project Manager, Research Assistant (Aug. 2022 - Present)

- Developed human digital twins technologies for prediction and management of emotion workers' mental health risks
- Conducted user research to explore how people perceive their emotions in the workplace with a smartphone application though data tracked by an activity tracker and how they interact with data to relieve stress

Positive Computing through Persuasive Interactions (@ Seoul National University)
Research Assistant (Apr. 2018 - Dec. 2019)

- Researched preliminary study on developing tool that can help manage stress by prediction and intervention plan setting
- Designed calendar-based smartphone application for stress management and conducted user research to understand how people anticipate their daily stress based on the event and how they mediate stress with intervention.

U-Glass Project (@ UNIST)
Project Manager - Design team (Feb. 2017 - Sep. 2017)

- Developed auxiliary tools for an exhibition based on augmented reality (AR) technology

- Managed design team to design content scenario for experiencing museum exhibits with AR glass and conducted user research to explore what will be an engagement factor in an immersive environment

ITNJ (Start-up, Ulsan)
UX Research Assistant / Product Designer (Jan. 2017 - Feb. 2017)

- Developed online educational content and designed portable tablet cradle
- Discovered new businesses based on the experiences of people using tablet PCs and designed the cradle to install the tablet

Work Experience

Krafton (PUBG Studio), Seoul
UX Designer (Jan. 2020 - Jul. 2022)

- Designed user experience (UX) for lobby screen (outgame) of Battleground Game Contribution page: Newspage, Notification center, Profile screen, Workshop screen
- Conducted design research to induce user retention

Coin-Cloud (Start-up), Daejeon
CEO / Designer (Jun. 2014 - Dec. 2015)

- Developed coin accumulation system using smartphones to reduce coin issuance cost
- Participated in start-up competition hosted by KBD Industrial Bank and attracted investment from companies

Teaching Experience

Design Knowledge and Skills (Intro to Information Visualization)
Teaching Assistant, Course: IID231 (Fall 2016), +20 students, UNIST

- An undergraduate course for teaching basic knowledge, tools, and practical skills for visualizing information with data.
- Provided feedback in the weekly one-on-one instruction session, guiding individual project development.

Publication

- Lee, K., & Hong, H. (2017, June). Designing for self-tracking of emotion and experience with tangible modality. In Proceedings of the 2017 Conference on Designing Interactive Systems (pp. 465-475).
- Lee, K., Self, J. A., & Hong, H. (2018). AESTHETIC PRODUCT INTERACTION: THE NECESSITY OF CONSISTENCY BETWEEN FUNCTION & EMOTION. DS 92: Proceedings of the DESIGN 2018 15th International Design Conference (pp. 2287-2298).
- Lee, K., & Hong, H. (2018, April). MindNavigator: Exploring the stress and self-interventions for mental wellness. In Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems (pp. 1-14).
- Lee, K., Cho, H., Toshnazarov, K., Narziev, N., Rhim, S. Y., Han, K., ... & Hong, H. (2020, April). Toward Future-Centric Personal Informatics: Expecting Stressful Events and Preparing Personalized Interventions in Stress Management. In Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems (pp. 1-13).

Conference Presentation

Oral Presentations

- Lee, K., & Hong, H. (2017, June). Designing for self-tracking of emotion and experience with tangible modality. Designing Interactive Systems, Edinburgh, UK
- Lee, K., & Hong, H. (2018, April). MindNavigator: Exploring the stress and self-interventions for mental wellness. Conference on Human Factors in Computing Systems, Montréal, Canada.

Technical Skills

Design Research Methods

- Interviews, Focus groups, Participatory design, Content analysis, Heuristic evaluation, Ethnographic observation

Prototyping & Graphic Tools

- Figma, Adobe Illustrator, Adobe Photoshop, Adobe XD, Adobe Premiere pro, Solidworks, Rhino KeyShot, Arduino