

Sangsu Jang

PhD

Design Based HCI
Researcher

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About Me

I am a doctoral researcher on Human-Computer Interaction driven by a passion for assisting people's self-reflection through reminiscing about their past and recording themselves in emotionally meaningful ways. My key strengths and abilities include a fearless approach to acquiring knowledge in new fields and utilizing new technologies (e.g., MCU, single-board computers, front/backend programming, and LLMs). I also have a deep enthusiasm for integrating these knowledge and technical abilities into research products to explore my research questions

Research Interests

#Human-Computer Interaction #Product Design #Personal Informatics
#Self-Recording #Autobiographical Memory #Life Logger
#Mental Wellbeing #Life Log Data #Design for Reflection

Career & Education

Career

2025.05
- current

Korea Advanced Institute of Science & Technology (KAIST)

Postdoctoral Researcher at DxD Lab
Directed by Hwajung Hong (Supported by 장영실 펠로우 프로그램)

2025.03
- 2025.04

Ulsan National Institute of Science & Technology (UNIST)

Postdoctoral Researcher at IPD Lab
Directed by Young-Woo Park

Education

2021
- 2025

Ulsan National Institute of Science & Technology (UNIST)

PhD, Department of Design
Advisor: Young-Woo Park

2019
- 2021

Ulsan National Institute of Science & Technology (UNIST)

Professional Master, Creative Design Engineering
Advisor: Young-Woo Park

2014
- 2019

Ulsan National Institute of Science & Technology (UNIST)

Bachelor of Science, Industrial Design
Bachelor of Science, Computer Science

Publications

Journal Papers

Jang, S., Lee, K. R., Goh, G., Kim, D., Yun, G., Kim, N., ... & Park, Y. W. (2023). Design and field trial of EmotionFrame: exploring self-journaling experiences in homes for archiving personal feelings about daily events. *Human-Computer Interaction*, 1-26. (SCIE, JIF 2021 6.459 Q1)

Jang, S., Lee, W., Kim, B., Odom, W., & Park, Y. W. (2022). Encountering Cover Versions of Songs Derived from Personal Music-Listening History Data: a Design and Field Trial of Musée in Homes. *Interacting with Computers*, 34(1), 24-42. (SCIE | SSCI, JIF 1.3 Q4)

Jang, S., Lee, S., Dzhoroev, T., Kim, T., Oh, H., Kim, N., & Park, Y. W. (2021). Design Guidelines for Contextual Awareness and Management of Hygiene in Daily Life with Infectious Viruses. *Archives of Design Research*, 34(3), 101-121. (한국연구재단 등재지)

Noh, B., Jang, S., Kim, K., & Park, Y. W. (2020). Bringing the colour senses of personal photos to everyday living environment: the design and deployment of a tangible interactive lighting artifact. *Digital Creativity*, 31(2), 114-132. (A&HCI)

Conference Proceedings

Jang, S., Kim, N., Kim, N., Moon, J.. & Park, Y.W. (2025, April) Journey to My Past: Exploring and Journaling Past Memories Evoked by Questions Framed as Proud Moments. In *Proceedings of the 2025 CHI Conference on Human Factors in Computing Systems*. [우수국제학술대회]

Kim, N., **Jang, S.**, Kim, H., Lee, J., & Park, Y. W. (2023, April). Design and Field Trial of Tunee in Shared Houses: Exploring Experiences of Sharing Individuals' Current Noise-level Preferences with Housemates. In *Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems* (pp. 1-15). [우수국제학술대회, Accepted rate 27.6%]

Kim, S., **Jang, S.**, Moon, J. Y., Han, M., & Park, Y. W. (2022, June). Slide2Remember: an Interactive Wall Frame Enriching Reminiscence Experiences by Providing Re-encounters of Taken Photos and Heard Music in a Similar Period. In *Designing Interactive Systems Conference* (pp. 288-300). [Acceptance rate 21.5%]

Kim, D., **Jang, S.**, Kim, B., & Park, Y. W. (2022, June). Design and Field Trial of Lumino in Homes: Supporting Reflective Life by Archiving and Showing Daily Moods with Light Colors. In *Designing Interactive Systems Conference* (pp. 1715-1728). [Acceptance rate 21.5%]

Jang, S., Park, Y. W., & Kim, C. (2021, December). Artistic Visualisation of Personal Data: A Case Study of Digital Scheduler. In *Congress of the International Association of Societies of Design Research* (pp. 2739-2750). Singapore: Springer Nature Singapore.

Kim, B., Kim, N., Yun, G., **Jang, S.**, Kwon, H., & Park, Y. W. (2021, December). Physical Traces and Materialization of Songs for Individuals' Music Participation in Cafés: The Design and Field Studies of Camue. In *Congress of the International Association of Societies of Design Research* (pp. 313-327). Singapore: Springer Nature Singapore.

Jang, S., Kim, S., Noh, B., & Park, Y. W. (2019, June). Monomizo: a tangible desktop artifact providing schedules from E-ink screen to paper. In *Proceedings of the 2019 on designing interactive systems conference* (pp. 1123-1130). [Accepted rate 25%]

Kim, K. J., **Jang, S.**, Kim, B., Kwon, H., & Park, Y. W. (2019, June). muRedder: Shredding speaker for ephemeral musical experience. In *Proceedings of the 2019 on designing interactive systems conference* (pp. 127-134). [Acceptance rate 25%]

Korea Peer Review Conference

장상수, 이경룡, 김도희, 고건일, 윤가희, 한민주, ... & 박영우. (2021). 일상 환경에서 정서 상태 정보 수집을 위한 IoT 벽걸이형 기기의 멀티 모달 알림 방식 탐구. 한국디자인학회 학술발표대회 논문집, 48-49.

장상수, 고성안, & 박영우. (2019). 성냥과 같은 상호작용 메타포를 이용하여 조명을 제어하는 스타일러스. 한국 HCI 학회 학술대회, 1175-1180.

Lecturer Experience

울산과학고등학교 2020학년도 SW 및 STEAM 교육 프로그램 강사 Arduino (IoT 시스템 구현하기)

울산과학고등학교 2019학년도 SW 및 STEAM 교육 프로그램 강사 Onshape (3D 모델링)

울산과학고등학교 2019학년도 SW 및 STEAM 교육 프로그램 강사 Processing (물리 엔진 구현)

울산 옥동 초/중학생 대상 프로그래밍 학원강사 2018.08- 2019.04 C/C++, Arduino, Javascript, HTML, CSS

Award, Exhibition & Demo

2022 대한민국 과학기술대전, 연구개발관-바이오/헬스, 일산 킨텍스 제 1 전시장, 22. 12.15-17, 과학기술정보통신부 주최

디자인 코리아 2022 '신기술분야융합디자인 성과관', aT 센터 전시(서울 양재동), 22. 11.23-27일

2019 on designing interactive systems conference Demo (Jun)

Patents & Design Rights

(특허/실용신안/국내) 사용자의 음원 청취기록을 바탕으로 커버 버전의 음원을 재생하는 장치 (1025085080000)

(특허/실용신안/국내) 전자 액자, 이의 구동 방법 및 컴퓨터 프로그램 (1026147620000)

(특허/실용신안/국내) 전자 잉크 디스플레이와 감열 인쇄 기능을 이용한 탁상용 달력 (1019895840000)

(특허/실용신안/국내) 조명 기구 및 조명 기구 제어 방법 (1019949910000)

(특허/실용신안/국내) 지팡이 장치 (1022130540000)

(디자인/국내) 수면램프 (3012903200000)

(디자인/국내) 인터랙티브 디스플레이가 구비된 액자 형태의 개인 정서 상태 수집장치 (3012064760000)

(디자인/국내) 스피커 (3011503410000)

(디자인/국내) 거치대가 부설된 에어샤워기 (3011464190000)

(디자인/국내) 거울이 부설된 옷걸이용 행거 (3011333120000)

(디자인/국내) 화상디자인이 표시된 휴대용 단말기(3010875100000, 3010840500000, 3010840510000, 3010840520000)

(디자인/국내) 지팡이 (3010157170000)

(디자인/국내) 조명용램프 (3009937940000)

(디자인/국내) 식물생장환경 측정 센서 (3009645310000, 3009645330000, 3009645320000)

Review Experience

ACM Conference Papers

DIS 2021-2025 Papers and Pictorials

DIS 2025 Work-In-Progress

CHI PLAY 2023 Work-In-Progress

CHI 2025 Papers

Journal Papers

2023 Behaviour & Information Technology

2025 Archive of Design Research