DaEun Choi

Human-Computer Interaction · Ph.D. Student

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Summary

I am a third-year Ph.D. student in the School of Computing at KAIST, working with Prof. Juho Kim. My research in Human-Computer Interaction (HCI) focuses on designing interactions for generative AI systems that support human creativity by enabling the expression, reuse, and evolution of ideas across diverse creative processes, including graphic design, architectural design, and video storytelling.

Education

KAIST (Korea Advanced Institute of Science and Technology) — *Daejeon, Republic of Korea*
Ph.D. in Computer Science — *Mar 2024 – Aug 2028 (expected)*
Advisor: Juho Kim

KAIST (Korea Advanced Institute of Science and Technology) — *Daejeon, Republic of Korea*
M.S. in Computer Science — *Mar 2022 – Feb 2024*
Advisor: Juho Kim / Outstanding M.S. Thesis Award [C6]

KAIST (Korea Advanced Institute of Science and Technology) — *Daejeon, Republic of Korea*
B.S. in Computer Science — *Mar 2017 – Feb 2022*
Double Major in Bio&Brain Engineering / Graduated Magna Cum Laude

Professional Experience

Autodesk Research — *Toronto, ON, Canada*
Ph.D. Intern, HCI & Visualization Research — *May 2026 – Sep 2026*

- Led HCI research project on supporting early-stage architectural design sketching with real-time criterion feedback.
- Built a sketching interface that combines VLM-based generative support with designer-authored layers of design criteria.
- Validated through an exploratory user study. Research outcome is under submission to a top-tier venue.
- Mentors: Joanne Leong, Kendra Wannamaker, Justin Matejka

Adobe Research — *Cambridge, MA, USA*
Research Scientist Intern, STORIE Lab — *Jun 2025 – Sep 2025*

- Led HCI research project on supporting video editors in exploring narrative possibilities using reference videos.
- Implemented an LLM- and vision-based pipeline to extract patterns from reference videos, and an interface for applying them to video editing.
- Validated through a comparative user study. Research outcome is under submission to a top-tier venue.
- Mentors: Valentina Shin, Mira Dontcheva, Karrie Karahalios

LG CNS — *Seoul, Republic of Korea*
Software Architect Intern — *Jan 2020 – Feb 2020*

- Architected and deployed AWS infrastructure (dev/prod/CI-CD) for a web service platform.
- Implemented multi-tier deployment pipeline with load balancing and infrastructure automation.

Publications

Conference Papers

[C10] **Maru: Information Architecture as a Shared Language for Generating Aligned and Persistent User Interfaces**
Eunhye Kim, **DaEun Choi**, Bryan Min, Hyunjung Yi, Yue Jiang, Juho Kim
ACM UIST 2026 (Acceptance rate: 20.1%)

[C9] **IdeaBlocks: Expressing and Reusing Divergent Intents for Graphic Design Exploration using Generative AI**
DaEun Choi, Kihoon Son, Jaesang Yu, Hyunjoon Jung, Juho Kim
ACM DIS 2026 (Acceptance rate: 21%)
Honorable Mention Award (Top 5%)

[C8] **ClearFairy: Capturing Creative Workflows through Decision Structuring, In-Situ Questioning, and Rationale Inference**
Kihoon Son, **DaEun Choi**, Tae Soo Kim, Young-Ho Kim, Sangdoo Yun, Juho Kim
ACM CHI 2026 (Acceptance rate: 25.3%)

[C7] **A Context-Aware Onboarding Agent for Metaverse Powered by Large Language Models**
Jihyeong Hong, Yokyung Lee, Dae Hyun Kim, **DaEun Choi**, Yeo-Jin Yoon, Gyu-cheol Lee, Zucheul Lee, Juho Kim
ACM DIS 2024 (Acceptance rate: 27%)

[C6] **CreativeConnect: Supporting Reference Recombination for Graphic Design Ideation with Generative AI**
DaEun Choi, Sumin Hong, Jeongeon Park, John Joon Young Chung, Juho Kim
ACM CHI 2024 (Acceptance rate: 26.4%)

[C5] **Demystifying Tacit Knowledge in Graphic Design: Characteristics, Instances, Approaches, and Guidelines**
Kihoon Son, **DaEun Choi**, Tae Soo Kim, Juho Kim
ACM CHI 2024 (Acceptance rate: 26.4%)
Honorable Mention Award (Top 5%)

[C4] **GenQuery: Supporting Expressive Visual Search with Generative Models**
Kihoon Son, **DaEun Choi**, Tae Soo Kim, Young-Ho Kim, Juho Kim
ACM CHI 2024 (Acceptance rate: 26.4%)

[C3] **Surch: Enabling Structural Search and Comparison for Surgical Videos**
Jeongyeon Kim, **DaEun Choi**, Nicole Lee, Matthew Beane, Juho Kim
ACM CHI 2023 (Acceptance rate: 27.6%)

[C2] **Stylette: Styling the Web with Natural Language**
Tae Soo Kim, **DaEun Choi**, Yoonseo Choi, Juho Kim
ACM CHI 2022 (Acceptance rate: 24.7%)
Honorable Mention Award (Top 5%)

[C1] **Reflect, not Regret: Understanding Regretful Smartphone Use with App Feature-Level Analysis**
Hyunsung Cho, **DaEun Choi**, Donghwi Kim, Wan Ju Kang, Eun Kyoung Choe, Sung-Ju Lee
ACM CSCW 2021 (Acceptance rate: 26%)
Best Paper Award (Top 1%) & Method Recognition

Journal Articles

[J1] **Feed-O-Meter: Investigating AI-Generated Mentee Personas as Interactive Agents for Scaffolding Design Feedback Practice**
Hyunseung Lim, Dasom Choi, **DaEun Choi**, Sooyohn Nam, Hwajung Hong
International Journal of Human-Computer Studies (IF = 6.0)

Posters & Demos

[P7] **Tasteply: Externalizing Stable and Situational Preference as Manipulable Spatial Objects**
DaEun Choi, Daniel Lee
ACM UIST 2026 Posters

[P6] **CORAL: Continually Learning Generative Interfaces from Collective User Interactions**
Daniel Lee, **DaEun Choi**, Hyewon Lee, Haijun Xia
ACM UIST 2026 Posters

[P5] **Supporting Design Reasoning in AI-assisted Interface Prototyping for HCI Research**
Eunhye Kim*, Minju Yoo*, Jenny Yang, **DaEun Choi**
ACM CHI 2026 Posters

[P4] **IdeaBlocks: Expressing and Reusing Exploratory Intents for Design Exploration with Generative AI**
DaEun Choi, Kihoon Son, Jaesang Yu, Hyunjoon Jung, Juho Kim
ACM UIST 2025 Demos

[P3] **ThematicPlane: Bridging Tacit User Intent and Latent Spaces for Image Generation**
Daniel Lee, Nikhil Sharma, Donghoon Shin, **DaEun Choi**, Harsh Sharma, Jeonghwan Kim, Heng Ji
ACM UIST 2025 Posters

[P2] **Expandora: Broadening Design Exploration with Text-to-Image Model**
DaEun Choi, Kihoon Son, Hyunjoon Jung, Juho Kim
ACM CHI 2025 LBW

[P1] **AudiLens: Configurable LLM-Generated Audiences for Public Speech Practice**
Jeongeon Park*, **DaEun Choi***
ACM UIST 2023 Student Innovation Contest
Jury's Best SIC Honorable Mention Award (Top 2 out of 10)

Honors & Awards

Awards

Special Recognition for Outstanding Reviews, CHI 2027 *2027*
Honorable Mention Award, DIS 2026 *[C9]* *2026*
Special Recognition for Outstanding Reviews, CHI 2026, DIS 2026, C&C 2026 × 3, UIST 2026 × 2 *2026*
Special Recognition for Outstanding Reviews, CHI 2025 × 2, DIS 2025, UIST 2025 × 2 *2025*
Honorable Mention Award, CHI 2024 *[C5]* *2024*
Special Recognition for Outstanding Reviews, DIS 2024 *2024*
Outstanding M.S. Thesis Award, School of Computing, KAIST *[C6]* *2024*
Outstanding Edu 4.0Q TA Award, KAIST *2023*
Outstanding TA Award, School of Computing, KAIST *2022*
Honorable Mention Award, CHI 2022 *[C2]* *2022*
Best Paper Award, CSCW 2021 *[C1]* *2021*
Dean's List, College of Engineering, KAIST *2020*

Scholarships

Misook Lim Scholarship, KAIST *2021*
KAIST Exemplary Conduct Scholarship, KAIST *2019*

Teaching

CS473: Introduction to Social Computing, Teaching Assistant *Fall 2025*
CS101: Introduction to Programming, Teaching Assistant *Spring 2019 – Spring 2025*
CS374: Introduction to Human-Computer Interaction, Teaching Assistant *Spring 2023*

Service & Leadership

Academic Service

Program Committee: UIST Posters (2026)
Paper Reviewer: CHI (2025–2027), UIST (2025–2026), DIS (2024–2026), C&C (2026), CHI LBW (2024–2025), CHI Posters (2026)
Student Volunteer: CHI (2024–2025), CSCW (2022)

Leadership & Activities

Student Organizer, KAIST-Google ExploreCSR Event Organizing Team *2023–2024*
Organizer, KAIST HCI Lunch Meeting *2023*
Head of Media Team, KAIST Graduate Student Association *2022–2025*
UX Researcher & Designer, KAIST LMS Redesign Team *2021*
Head of Design & Technology Team, KAIST Undergraduate Student Association *2020–2021*
Web Designer & Developer, SPARCS KAIST *2019–2022*
Student Representative, KAIST School of Computing Undergraduate Student Council *2019–2020*