Saelyne Yang

Postdoctoral Scholar, Carnegie Mellon University

saelyney@andrew.cmu.edu | saelyne.com

Research Interests Human–AI Interaction · Human–Agent Collaboration · GUI Agents · Video Interaction and Understanding · Procedural Task Learning · Skill Learning

Education

KAIST (Korea Advanced Institute of Science and Technology) Mar.2021 - Feb. 2026
Ph.D. in School of Computing (Advisor: Juho Kim) Daejeon, S.Korea

- Outstanding Thesis Award
- GPA: 4.16/4.3

KAIST (Korea Advanced Institute of Science and Technology) Mar.2019 - Feb.2021
M.S. in School of Computing (Advisor: Juho Kim) Daejeon, S.Korea

- Outstanding Thesis Award

KAIST (Korea Advanced Institute of Science and Technology) Mar.2015 - Feb.2019
B.S. in School of Computing Daejeon, S.Korea

- Graduated with Honors (Magna Cum Laude)
- Exchange student in UCSC, 2017 Summer

Employment

Carnegie Mellon University, Human Computer Interaction Institute Mar. 2026 - Present
Postdoctoral Fellow, Advisor: Jeffrey P. Bigham Pittsburgh, PA

Adobe Research - STORIE Lab May. 2024 - Aug. 2024
Research Intern, Mentors: Ding Li, Anh Truong Seattle, WA

Autodesk Research - HCI & Visualization Group Jun. 2023 - Sep. 2023
Research Intern, Mentors: Jo Vermeulen, Justin Matejka, George Fitzmaurice Toronto, Ontario

LG AI Research - Advanced ML Lab Oct. 2022 - Feb. 2023
Research Intern, Mentor: Moontae Lee Seoul, S.Korea

Adobe Research - Creative Technologies Lab Jun. 2020 - Sep. 2020
Research Intern, Mentor: Hijung Valentin Shin Virtual

ACRYL Jan. 2018 - Feb. 2018
Software Engineer Intern Seoul, S.Korea

Publications

Conference and Journal Papers

[c.15] Contexty: Capturing and Organizing In-situ Thoughts for Context-Aware AI Support
Yoonsu Kim, Chanbin Park, Kihoon Son, **Saelyne Yang**, Juho Kim
UIST 2026: ACM Symposium on User Interface Software and Technology

[c.14] GUIDE: A Benchmark for Understanding and Assisting Users in Open-Ended GUI Tasks
Saelyne Yang, Jaesang Yu, Yi-Hao Peng, Kevin Qinghong Lin, Jae Won Cho, Yale Song, Juho Kim
CVPR 2026: IEEE/CVF Conference on Computer Vision and Pattern Recognition

[c.13] "I Can't Keep Up": Accessibility Barriers in Video-Based Learning for Individuals with BIF
Hyehyun Chu, Seungju Kim, Chen Zhou, Yu-Kai Hung, **Saelyne Yang** Hyun W. Ka, Juho Kim
CHI 2026: ACM Conference on Human Factors in Computing Systems

[c.12] VideoMix: Aggregating How-To Videos for Task-Oriented Learning
Saelyne Yang, Anh Truong, Juho Kim, Dingzeyu Li
IUI 2025: ACM Conference on Intelligent User Interfaces

[c.11] Silent Impact: Tracking Tennis Shots from the Passive Arm
Junyong Park, **Saelyne Yang**, Sungho Jo
UIST 2024: ACM Symposium on User Interface Software and Technology

[c.10] AQuA: Automated Question-Answering in Software Tutorial Videos with Visual Anchors
Saelyne Yang, Jo Vermeulen, George Fitzmaurice, Justin Matejka
CHI 2024: ACM Conference on Human Factors in Computing Systems

[c.9] ExpressEdit: Video Editing with Natural Language and Sketching
Bekzat Tilekbay, **Saelyne Yang**, Michal A. Lewkowicz, Alex Suryapranata, Juho Kim
IUI 2024: ACM Conference on Intelligent User Interfaces

[c.8] YTCommentQA: Video Question Answerability in Instructional Videos
Saelyne Yang, Sunghyun Park, Yunseok Jang, Moontae Lee
AAAI 2024: Association for the Advancement of Artificial Intelligence

[c.7] Towards Content-based Pixel Retrieval in Revisited Oxford and Paris
Guoyuan An, Woo Jae Kim, **Saelyne Yang**, Rong Li, Yuchi Huo, Sungeui Yoon
ICCV 2023: International Conference on Computer Vision

[c.6] Beyond Instructions: A Taxonomy of Information Types in How-to Videos
Saelyne Yang, Sangkyung Kwak*, Juhoon Lee*, Juho Kim
CHI 2023: ACM Conference on Human Factors in Computing Systems (=equal contribution)*

[c.5] AVscript: Accessible Video Editing with Audio-Visual Scripts
Mina Huh, **Saelyne Yang**, Yi-Hao Peng, Xiang 'Anthony' Chen, Young-Ho Kim, Amy Pavel
CHI 2023: ACM Conference on Human Factors in Computing Systems

[c.4] CatchLive: Real-time Summarization of Live Streams with Stream Content and Interaction Data
Saelyne Yang, Jisu Yim, Juho Kim, Hijung Valentina Shin
CHI 2022: ACM Conference on Human Factors in Computing Systems

[c.3] SoftVideo: Improving the Learning Experience of Software Tutorial Videos with Collective Interaction Data
Saelyne Yang, Jisu Yim, Aitolkyn Baigutanova, Seoyoung Kim, Minsuk Chang, Juho Kim
IUI 2022: ACM Conference on Intelligent User Interfaces

[c.2] Snapstream: Snapshot-based Interaction in Live Streaming for Visual Art
Saelyne Yang, Changyoon Lee, Hijung Valentina Shin, Juho Kim
CHI 2020: ACM Conference on Human Factors in Computing Systems

[c.1] What Makes It Hard for Users to Follow Software Tutorial Videos?
Saelyne Yang, Juho Kim
HCI Korea 2020, The HCI Society of Korea

Posters, Demos, and Workshop Papers

[p.5] Towards Benchmarking Screen Reader Use in Computer Use Agents
Valerie Sazonova, **Saelyne Yang**, Jeffrey P Bigham, Yi-Hao Peng
UIST 2026 Poster

[p.4] When AI "Works," When Does Help Begin?: Intergenerational Support Around Older Adults' LLM Usage
Hyehyun Chu, Yuri Lee, Yeon Su Park, **Saelyne Yang**, Juho Kim
CSCW 2026 Workshop on Growing Up (and Old) with AI: Co-Constructing the Future for Family-Centered AI

[p.3] Enhancing How People Learn Procedural Tasks Through How-to Videos
Saelyne Yang
UIST 2024 Doctoral Symposium

[p.2] Fine-Grained Action Understanding with Tools in Instructional Videos
Saelyne Yang, Jaesang Yu, Jae Won Cho, Juho Kim
CVPR 2024 Workshop on Learning from Procedural Videos and Language

[p.1] Improving Video Interfaces by Presenting Informational Units of Videos
Saelyne Yang, Sankyung Kwak, Tae Soo Kim, Juho Kim
CHI 2022 Workshop on Computational Approaches for Understanding, Generating, and Adapting User Interfaces

Honors & Awards

Outstanding Paper Award 2026
CVPR 2026 2nd Workshop on MMRAgI

Outstanding PhD Thesis Award 2026
School of Computing, KAIST

Special Recognition for Outstanding Reviews (x2) 2025
CHI 2025

AAAI-24 Student Scholar 2024
AAAI 2024

Google Student Travel Grant 2023
KAIST-Google

NAVER Ph.D. Fellowship 2022
NAVER

Special Recognition for Outstanding Reviews 2022
CSCW 2023

Special Recognition for Outstanding Reviews 2022
CHI 2022

An Outstanding TA Award Spring 2022
School of Computing, KAIST

Inseong Fellow ($1,000) 2021
KAIST, Scholarship given to students for their service and impact on the school

An Outstanding TA Award Spring 2021
School of Computing, KAIST

An Outstanding MS Thesis Award 2021
School of Computing, KAIST

Kwanjeong scholarship ($20,000) 2019-20
Scholarship given to outstanding graduate students in the nation

Encouragement Award 2018
SW Talent Festival, hosted by the Ministry of Science and ICT

Dean's list Spring 2018
School of Computing, KAIST

Excellence Award 2018
Writing Contest, KAIST

Google Women Techmakers Scholarship 2018
Google APAC

LINE Scholarship 2017
Scholarship given to selected students in the department

National Science and Technology Scholarship 2017-2018
Scholarship covered for undergraduate studies

Academic Services

Organizing Committee

- UIST 2023 Video Previews Chairs

Program Committee

- UIST 2026 (Associate Chair)
- AAAI 2026
- IUI 2025
- CVPR 2024 LPVL Workshop
- CHI 2022, 2023 Late-Breaking Work

Session Chair

- UIST 2025
- CHI 2024

Reviewer (* = Outstanding reviews)

- **HCI**: CHI 2026 – 2020 (* x3), UIST 2026 – 2022, IUI 2025, IMWUT 2025, DIS 2025, 2023, CSCW 2023 (*), 2020
- **AI**: NeurIPS 2026, CVPR 2026, AAAI 2026, 2025
- **Others**: Learning at Scale 2026, IEEE Transactions on Learning Technologies

Student Volunteer

- AAAI 2024
- IUI 2022
- CHI 2019

Invited Talks

Enhancing How People Learn Procedural Tasks Through How-to Videos Jul, 2024
Twelve Labs

Improving Video Experiences by Leveraging User Interaction and Content Analysis Oct, 2023
University of British Columbia (Host: Prof. Dongwook Yoon)

Improving Video Experiences by Leveraging User Interaction and Content Analysis Sep, 2023
DGP Lab, University of Toronto

Improving Video Experiences by Leveraging User Interaction and Content Analysis May, 2023
UNIST - CSE333 Intro to HCI (Host: Prof. Jaeyeon Lee)

HCI@KAIST Workshop Panel Jun, 2022
Meta discussion on CHI, KAIST

Teaching

Teaching Assistant

Wearable User Interface Spring 2024
KAIST CS486

Introduction to Human-Computer Interaction Spring 2021, 2020, 2019
KAIST CS374

Data Structure Spring 2023
KAIST CS206

Introduction to Programming Spring 2022, Fall 2021
KAIST CS101

Service and Leadership

KAIST HCI Lunch Meeting 2024
Organizer

KAIST-Google ExploreCSR 2021
Organizer

KAIST Committee on Social Inclusion 2021-2022
Student representative