DASOM CHOI

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RESEARCH INTEREST

Human-Computer Interaction, Human-centered Design, Human-algorithm Interaction, People with disability, Inclusive algorithm, Accessibility

EDUCATION

KAIST, Department of Industrial Design — Mar. 2022 - Present
Ph.D Student
Advisor: Professor **Hwajung Hong**

KAIST, Department of Industrial Design — Aug. 2018 – Feb. 2021
Master of Science
Advisor: Professor **Sangsu Lee**
Thesis: Designing Speech Rate in Conversational Agent for People with Vision Impairment

UNIST, Department of Design and Human Factor Engineering — Mar. 2013 – Feb. 2018
Bachelor of Science

PUBLICATIONS

Conference / Journal

[c.3] **Dasom Choi**, Uichin Lee, and Hwajung Hong. "It's not wrong, but I'm quite disappointed": Toward an Inclusive Algorithmic Experience for Content Creators with Disabilities. *Proceedings of the 2022 CHI Conference on Human Factors in Computing Systems.* (CHI 2022, forthcoming)

[c.2] Mina Huh, Yunjung Lee, **Dasom Choi**, Haesoo Kim, Uran Oh, and Juho Kim. Cocomix: Utilizing Comments to Improve Non-Visual Webtoon Accessibility. *Proceedings of the 2022 CHI Conference on Human Factors in Computing Systems.* (CHI 2022, forthcoming)

[c.1] **Dasom Choi**, Daehyun Kwak, Minji Cho, and Sangsu Lee. "Nobody Speaks that Fast!" An Empirical Study of Speech Rate in Conversational Agents for People with Vision Impairments. *In Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems.* (CHI 2020)
Best Paper Honorable Mention (Top 5%)

Poster / Workshop

[p.1] **Dasom Choi**, Aikerim Orken, Han Lee, and Hwajung Hong. Designing a Crowd-sourcing Platform for Generating Subtitles of Accessible Films. (HCI Korea 2017)

WORK EXPERIENCES

UX Designer, *SI-Analytics* — Jan.2021 - May.2021

- Designed a UX/UI of a system that detects objects in satellite images using algorithms. Conducted focus group and ethnography with military image analysis specialists and extracted the design direction of the system's main features.

Research Assistant, *KAIST MCM Research Center* Sep.2020 - Dec.2020

- Topic: Movable expanding negative pressure ward for infectious hospital services
- Advisor: Professor Tek-Jin Nam
- Identifies needs of several stakeholders through interviews and observations and designs stakeholder persona and journey. Discovers systemic and empirical design elements that can be linked with existing medical resources and then derived expected user scenarios.

Research Assistant, *Samsung Electronics* Aug.2019 - Dec.2019

- Topic: Interaction model for proactive AI agent
- Advisor: Professor Sangsu Lee
- Developed an interaction model and exploring design considerations for AI-based proactive conversational agents. Conducted design workshops and content analysis to examine major elements of proactive conversational agents.

Research Assistant, *NH Investment & Securities* Sep.2019 - Dec.2019

- Topic: Mobile platform for investment portfolio market.
- Advisor: Professor Sangsu Lee
- Designed a portfolio market application of stock investment service that encourages users to make continuous investments based on their interests. Conducted a heuristic evaluation, user and expert interviews, and market research in order to extract design directions.

Research Assistant, *NH Investment & Securities* Mar.2019 - July.2019

- Topic: Mobile account opening system for stock investment
- Advisor: Professor Sangsu Lee
- Identified the problems of the existing account opening process through heuristic evaluation, video ethnography, and think aloud. Proposed several design directions and designed mobile screens by reflecting those directions. The outcomes are actually applied to the current NH Investment Securities' mobile application 'Namu.'

Undergraduate Design Intern, *Disegno T9 Lab, UNIST* Sep.2018 - Dec.2018

- Advisor: Professor Yunwoo Jeong
- Participated in several design projects: visualization and modeling in 'Hybrid Module Mobility' (a four-wheeled electric bicycle with adaptable module system), visualization in 'Hyperloop Station' (a new transportation station with a dual rotating system which maximizes the efficiency), and concept development in 'Autonomous Mobility Concept Design' (a transformable interior design according to the purpose).

Undergraduate Research Intern, *DxD (data, interaction, design) Lab, UNIST* Apr.2016 - Aug.2018

- Advisor: Professor Hwajung Hong
- Developed a crowdsourcing platform that enables web users to produce descriptive captions of short movie clips for people with hearing impairments, and presented a paper at HCI Korea '17. Conducted user studies including observations and interviews in order to drive design considerations for the crowdsourcing platform.

TEACHING ASSISTANT

System Design, *ID403, KAIST* 2020 Spring

- Instructor: Professor Sangsu Lee
- An undergraduate course for industry-academic collaborative project based on the system-level design process. Provided feedback in the weekly group instruction session and comments on assignments; designing course materials.

Interface Design, *ID307, KAIST* 2019 Fall

- Instructor: Professor Sangsu Lee
- An undergraduate course for teaching basic knowledge, tools, and practical skills for interface design. Provided feedback in the weekly one-on-one instruction session; guiding individual project development; grading and assessment for final projects.

Portfolio and Exhibition Design, *ID416, KAIST* 2019 Spring

- Instructor: Professor Jinha Seong
- An undergraduate course to teach the organization process and skills for designing a portfolio.

HONORS AND AWARDS

Reddot Design Award, Aline: An ESG-based value investment service 2021

IF Design Award Gold, Aline: An ESG-based value investment service 2021

IF Design Award, Stockbox: a stock gift service 2021

IF Design Award, Pinto: an investment education system with parents 2021

IF Design Award, Aqua: a new paradigm of personal asset management. 2021

Best Paper Honorable Mention, *ACM Conference on Human Factors in Computing (CHI 2020)* 2020

James Dyson Design Award National Winner, reuse-it 2019
Advisor: Professor Sangmin Bae
A renowned international award to encourage young designers and engineers (*cash prize of USD 2,500*).
We proposed a 'reuse-it', a working prototype to make post-it with scrap papers.

Major Research Achievements of KAIST 2020

Korean Government Scholarship, KAIST 2018 - 2021

Korean Government Scholarship, UNIST 2013 - 2017

SKILLS

User Research
Interviews, Participatory design, Content analysis, Heuristic evaluation, Ethnographic observation

Prototyping & Graphic Tools
Sketch, Figma, Adobe Illustrator, Adobe Photoshop, Adobe XD, Adobe Premiere pro, Solidworks, Autodesk Fusion 360, Rhino KeyShot, Arduino

Statistics & Programming
SPSS, Python, HTML, CSS

PRESS

A study on accessible speech rate of conversational agents for people with vision impairments, *KAIST College of Engineering News* (Apr. 2020)

Dyson announces the domestic winner of the James Dyson Awards 2019, *Seoul Finance and Newsis* (Sep. 2019)

ACADEMIC SERVICE

Peer review
ACM DIS 2019 Paper