TAE SOO KIM

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RESEARCH INTEREST

My work falls in the intersection of human-computer interaction (HCI) and artificial intelligence (AI). I explore interaction and AI techniques that can enable users to create or adapt software **tools** that are **tailored** to their own needs and challenges. Specifically, I design **interactive modules** that users can compose into bespoke tools.

EDUCATION

KAISTPh.D. in Computer Science
Daejeon, South Korea

Advisor: Juho Kim

Mar. 2020 - Feb. 2022

M.S. in Computer Science (Outstanding Thesis Award)

Daejeon, South Korea

Advisor: Juho Kim

KAIST Sep. 2015 - Feb. 2020

B.S. in Computer Science (Magna Cum Laude)

Daejeon, South Korea

PUBLICATIONS

Conference and Journal Papers

[C13] One vs. Many: Comprehending Accurate Information from Multiple Erroneous and Inconsistent AI Generations

Yoonjoo Lee, Kihoon Son, **Tae Soo Kim**, Jisu Kim, John Joon Young Chung, Eytan Adar, Juho Kim *FAccT 2024: Proceedings of the 2023 ACM Conference on Fairness, Accountability, and Transparency. (to appear)*

[C12] EvalLM: Interactive Evaluation of Large Language Model Prompts on User-Defined Criteria

Tae Soo Kim, Yoonjoo Lee, Jamin Shin, Young-Ho Kim, Juho Kim

CHI 2024: Proceedings of the 2024 CHI Conference on Human Factors in Computing Systems. (to appear)

[C11] GenQuery: Supporting Expressive Visual Search with Generative Models

Kihoon Son, DaEun Choi, Tae Soo Kim, Young-Ho Kim, Juho Kim

CHI 2024: Proceedings of the 2024 CHI Conference on Human Factors in Computing Systems. (to appear).

Honorable Mention Award

[C10] Demystifying Tacit Knowledge in Graphic Design: Characteristics, Instances, Approaches, and Guidelines

Kihoon Son, DaEun Choi, Tae Soo Kim, Juho Kim

CHI 2024: Proceedings of the 2024 CHI Conference on Human Factors in Computing Systems. (to appear)

[C9] The Semantic Reader Project: Augmenting Scholarly Documents through AI-Powered Interactive Reading Interfaces

Kyle Lo, Joseph Chee Chang, Andrew Head, Jonathan Bragg, Amy X. Zhang, Cassidy Trier, (+ 47 authors including **Tae Soo Kim**), Marti A. Hearst, Daniel S. Weld

Communications of the ACM 2024. (to appear)

[C8] Cells, Generators, and Lenses: Design Framework for Object-Oriented Interaction with Large Language Models

Tae Soo Kim, Yoonjoo Lee, Minsuk Chang, Juho Kim

UIST 2023: Proceedings of the 2023 ACM Symposium on User Interface Software and Technology.

[C7] Papeos: Augmenting Research Papers with Talk Videos

Tae Soo Kim, Matt Latzke, Jonathan Bragg, Amy X. Zhang, Joseph Chee Chang

UIST 2023: Proceedings of the 2023 ACM Symposium on User Interface Software and Technology.

[C6] DAPIE: Interactive Step-by-Step Explanatory Dialogues to Answer Children's Why and How Questions

Yoonjoo Lee, Tae Soo Kim, Sungdong Kim, Yohan Yun, Juho Kim

CHI 2023: Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems.

[C5] Stylette: Styling the Web with Natural Language

Tae Soo Kim, DaEun Choi, Yoonseo Choi, Juho Kim

CHI 2022: Proceedings of the 2022 CHI Conference on Human Factors in Computing Systems.

Honorable Mention Award

[C4] Promptiverse: Scalable Generation of Scaffolding Prompts Through Human-AI Hybrid Knowledge Graph **Annotation**

Yoonjoo Lee, John Joon Young Chung, Tae Soo Kim, Jean Y Song, Juho Kim

CHI 2022: Proceedings of the 2022 CHI Conference on Human Factors in Computing Systems.

[C3] Winder: Linking Speech and Visual Objects to Support Communication in Asynchronous Collaboration

Tae Soo Kim, Seungsu Kim, Yoonseo Choi, Juho Kim

CHI 2021: Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems.

[C2] Supporting Collaborative Sequencing for Small Groups through Visual Awareness

Tae Soo Kim, Nitesh Goyal, Jeongyeon Kim, Juho Kim, Sungsoo (Ray) Hong

Proceedings of the ACM on Human-Computer Interaction, Volume 5, Issue CSCW. April 2021. Presented at CSCW 2021.

[C1] Design for Collaborative Information-Seeking: Understanding User Challenges and Deploying Collaborative **Dynamic Queries**

Sungsoo (Ray) Hong, Minhyang (Mia) Suh, Tae Soo Kim, Irina Smoke, Sangwha Sien, Janet Ng, Mark Zachry, Juho Kim

Proceedings of the ACM on Human-Computer Interaction, Volume 3, Issue CSCW. November 2019. Presented at CSCW 2019.

Posters, Demos, and Workshop Papers

[D4] LMCanvas: Object-Oriented Interaction to Personalize Large Language Model-Powered Writing Environment

Tae Soo Kim, Arghya Sarkar, Yoonjoo Lee, Minsuk Chang, Juho Kim

CHI 2023 Workshop on Generative AI and HCI

[D3] Interactive Children's Story Rewriting Through Parent-Children Interaction

Yoonjoo Lee, Tae Soo Kim, Minsuk Chang, Juho Kim

ACL 2022 Workshop on Intelligent and Interactive Writing Assistant (In2Writing)

[D2] Improving Video Interfaces by Presenting Informational Units of Videos

Saelyne Yang, Sangkyung Kwak, Tae Soo Kim, Juho Kim

CHI 2022 Workshop on Computational Approaches for Understanding, Generating, and Adapting User Interfaces

[D1] Consensus Building in Collaborative Sequencing with Visual Awareness

Tae Soo Kim, Sungsoo (Ray) Hong, Nitesh Goyal, Jeongyeon Kim, Juho Kim

CHI 2020 Extended Abstract

RESEARCH EXPERIENCE

Allen Institute for AI Jul. 2022 - Oct. 2022

Research Scientist Intern, Semantic Scholar

Mentors: Joseph Chee Chang, Amy X. Zhang, Jonathan Bragg

Seattle, WA [C7]

Dec. 2017 - Feb. 2020 KIXLAB, KAIST

Undergraduate Research Intern

Daejeon, South Korea Mentors: Juho Kim, Ray Hong [C1, C2, D1]

HONORS AND AWARDS

Honorable Mention Award ACM CHI 2024	2024
Outstanding TA Award School of Computing, KAIST	2023
AI2 Outstanding Intern of the Year Award Allen Institute for AI	2022
Honorable Mention Award ACM CHI 2022	2022
Outstanding M.S. Thesis Award School of Computing, KAIST	2022
Special Recognition for Outstanding Reviews CHI 2022, UIST 2022, CSCW 2023, CHI 2023, CHI 2024	2021, 2022, 2023
Dean's List School of Computing, KAIST	Spring 2018
TEACHING	
Human-AI Interaction KAIST CS496G Teaching Assistant, Instructor: Juho Kim	Fall 2023
Data Structure KAIST CS206 Teaching Assistant, Instructor: Eun Young Moon	Spring 2023
Design and Analysis of Algorithm KAIST CS500 Teaching Assistant, Instructor: Sunghee Choi	Spring 2022
Introduction to Human-Computer Interaction KAIST CS374 Teaching Assistant, Instructor: Juho Kim	Spring 2021
Introduction to Social Computing KAIST CS473 Teaching Assistant, Instructor: Juho Kim	Fall 2020
ACADEMIC SERVICES	

ACADEMIC SERVICES

Program Committee

CHI LBW 2024, 2023

Reviewer

CHI 2024, 2023, 2022

UIST 2024, 2023, 2022

CSCW 2024, 2023, 2020

DIS 2023

CHI LBW 2021

Student Volunteer

UIST 2023, 2021

CHI 2022

INVITED TALKS

Guest Lecture at NYU Abu Dhabi CDAD-UH 1044Q Human-Centered Data Science Title: "Interactively Evaluating LLMs on Specific, Subjective Criteria"	Apr. 2024 Dec. 2023
NAVER Tech Talk Talk on the "Cells, Generators, and Lenses" and "EvalLM" papers.	Nov. 2023
Guest Lecture at PSU IST 597-001 Intelligent and Interactive Writing Assistants Title: "Designing for Object-Oriented Interaction in Large Language Model-Powered Writing Interfaces"	Sep. 2023
Invited Talk at Manila ACM SIGCHI Chapter Title: "Mapping Multiple Modalities to Empower Novice Designers"	Jun. 2022