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.*

[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.

[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.

[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.

Honorable Mention Award

[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.

[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

[D6] How to Reflect Diverse People's Perspectives in Large-Scale LLM-based Evaluations?

Yoonjoo Lee, Tae Soo Kim, Juho Kim

CHI 2024 Workshop on Human-Centered Evaluation and Auditing of Language Models (HEAL)

[D5] Unveiling Disparities in Web Task Handling Between Human and Web Agent

Kihoon Son, Jinhyeon Kwon, DaEun Choi, Tae Soo Kim, Young-Ho Kim, Sangdoo Yun, Juho Kim

CHI 2024 Workshop on Computational Methodologies for Understanding, Automating, and Evaluating User Interface

[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

Jul. 2022 - Oct. 2022 Allen Institute for AI Research Scientist Intern, Semantic Scholar Seattle, WA Mentors: Joseph Chee Chang, Amy X. Zhang, Jonathan Bragg [C7] KIXLAB, KAIST Dec. 2017 - Feb. 2020 Daejeon, South Korea Undergraduate Research Intern Mentors: Juho Kim, Ray Hong [C1, C2, D1] HONORS AND AWARDS **Honorable Mention Award** 2022, 2024 ACM CHI 2022, ACM CHI 2024 2023 **Outstanding TA Award** School of Computing, KAIST AI2 Outstanding Intern of the Year Award 2022 Allen Institute for AI Outstanding M.S. Thesis Award 2022 School of Computing, KAIST **Special Recognition for Outstanding Reviews** 2021, 2022, 2023 CHI 2022, UIST 2022, CSCW 2023, CHI 2023, CHI 2024 Spring 2018 Dean's List School of Computing, KAIST **TEACHING Human-AI Interaction Fall 2023** KAIST CS496G Teaching Assistant, Instructor: Juho Kim **Data Structure Spring 2023, Fall 2024** KAIST CS206 Teaching Assistant, Instructor: Eun Young Moon **Design and Analysis of Algorithm** Spring 2022 KAIST CS500 Teaching Assistant, Instructor: Sunghee Choi **Introduction to Human-Computer Interaction** Spring 2021 KAIST CS374 Teaching Assistant, Instructor: Juho Kim Fall 2020 **Introduction to Social Computing**

ACADEMIC SERVICES

KAIST CS473 Teaching Assistant, Instructor: Juho Kim

Program Committee

CHI LBW 2024, 2023

Reviewer

CHI 2025, 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