TAE SOO KIM

taesoo.kim@kaist.ac.kr   https://taesookim.com

RESEARCH INTEREST

My work falls in the intersection of human-computer interaction (**HCI**) and artificial intelligence (**AI**). I design interaction techniques powered by machine learning (ML) models that enable and facilitate **intent-driven creation** (e.g., design, writing). Recently, I have been interested in investigating how to **modularize** ML models or pipelines to enable users to interact with these modules to manipulate these pipelines.

EDUCATION

KAIST   **Mar 2022 - Present**
Ph.D. in Computer Science   *Daejeon, South Korea*
Advisor: Juho Kim

KAIST   **Mar 2020 - Feb 2022**
M.S. in Computer Science   *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

[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. Article No.: 176, pp 1–29. 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. Article No.: 106, pp 1–24. Presented at CSCW 2019.

Posters, Demos, and Workshop Papers

[P4] LMCanvas: Object-Oriented Interaction to Personalize Large Language Model-Powered Writing Environment
Tae Soo Kim, Arghya Sarkar, Yoonjoo Lee, Minsuk Chang, Juho Kim
CHI 2022 Workshop on Generative AI and HCI

[P3] 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

[P2] 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

[P1] 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   *Seattle, WA*
Mentor: Joseph Chee Chang, Amy X. Zhang, Jonathan Bragg   [under submission]

KIXLAB, KAIST   **Dec 2017 - Feb 2020**
Undergraduate Research Intern   *Daejeon, South Korea*
Mentor: Juho Kim, Ray Hong   [C1, C2, P1]

HONORS AND AWARDS

AI2 Outstanding Intern of the Year Award   **2022**
Allen Institute for AI

Honorable Mention Award   **2022**
ACM CHI 2022

Outstanding M.S. Thesis Award   **2022**
School of Computing, KAIST

Special Recognition for Outstanding Reviews   **2021, 2022**
CHI 2022, UIST 2022, CSCW 2023, CHI 2023

Dean's List   **Spring 2018**
School of Computing, KAIST

TEACHING

Data Structure   **Spring 2023**
KAIST CS206, Instructor: Eun Young Moon

Design and Analysis of Algorithm   **Spring 2022**
KAIST CS500, Instructor: Sunghee Choi

Introduction to Human-Computer Interaction   **Spring 2021**
KAIST CS374, Instructor: Juho Kim

Introduction to Social Computing   **Fall 2020**
KAIST CS473, Instructor: Juho Kim

ACADEMIC SERVICES

Program Committee

CHI LBW 2023

Reviewer

DIS 2023

CHI 2022, 2023

UIST 2022

CSCW 2020, 2023

CHI LBW 2021

Student Volunteer

CHI 2022

UIST 2021

INVITED TALKS

Invited talk at Manila ACM SIGCHI Chapter   **June 2022**