

# 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 tools that enable users to **design, develop, and test** novel **applications powered by machine learning models**. Recently, I have been interested in investigating how to embed human and personal **values** into ML models.

## EDUCATION

---

<b>KAIST</b> <i>Ph.D. in Computer Science</i> <i>Advisor: Juho Kim</i>	<b>Mar. 2022 - Present</b> <i>Daejeon, South Korea</i>
--	---

<b>KAIST</b> <i>M.S. in Computer Science</i> <i>Advisor: Juho Kim</i>	<b>Mar. 2020 - Feb. 2022</b> <i>Daejeon, South Korea</i>
---	---

<b>KAIST</b> <i>B.S. in Computer Science (Magna Cum Laude)</i>	<b>Sep. 2015 - Feb. 2020</b> <i>Daejeon, South Korea</i>
---	---

## PUBLICATIONS

---

### Conference and Journal Papers

[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 (to appear).*

[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 (to appear).*

[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.*

**Preprints**

**[A2] EvalLM: Interactive Evaluation of Large Language Model Prompts on User-Defined Criteria**

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

*Under Review, 2023.*

**[A1] GenQuery: Supporting Expressive Visual Search with Generative Models**

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

*Under Review, 2023.*

**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*

**[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**

*Research Scientist Intern, Semantic Scholar*

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

**Jul. 2022 - Oct. 2022**

*Seattle, WA*

[C7]

**KIXLAB, KAIST**

*Undergraduate Research Intern*

Mentor: Juho Kim, Ray Hong

**Dec. 2017 - Feb. 2020**

*Daejeon, South Korea*

[C1, C2, D1]

**HONORS AND AWARDS**

**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*

**2021, 2022**

## TEACHING

---

<b>Human-AI Interaction</b> <i>KAIST CS496G Teaching Assistant, Instructor: Juho Kim</i>	<b>Fall 2023</b>
<b>Data Structure</b> <i>KAIST CS206 Teaching Assistant, Instructor: Eun Young Moon</i>	<b>Spring 2023</b>
<b>Design and Analysis of Algorithm</b> <i>KAIST CS500 Teaching Assistant, Instructor: Sunghee Choi</i>	<b>Spring 2022</b>
<b>Introduction to Human-Computer Interaction</b> <i>KAIST CS374 Teaching Assistant, Instructor: Juho Kim</i>	<b>Spring 2021</b>
<b>Introduction to Social Computing</b> <i>KAIST CS473 Teaching Assistant, Instructor: Juho Kim</i>	<b>Fall 2020</b>

## ACADEMIC SERVICES

---

### Program Committee

CHI LBW 2023

### Reviewer

CHI 2023, 2022

UIST 2023, 2022

CSCW 2023, 2020

DIS 2023

CHI LBW 2021

### Student Volunteer

CHI 2022

UIST 2021

## INVITED TALKS

---

<b>Guest Lecture at PSU IST 597-001 Intelligent and Interactive Writing Assistants</b> Title: <i>"Designing for Object-Oriented Interaction in Large Language Model-Powered Writing Interfaces"</i>	<b>Sep. 2023</b>
<b>Invited Talk at Manila ACM SIGCHI Chapter</b> Title: <i>"Mapping Multiple Modalities to Empower Novice Designers"</i>	<b>Jun. 2022</b>