

# Jaeyoon Song

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## INTERESTS

Large Language Models, Human-AI Interaction, Multi-Agent Systems.

## EDUCATION

**Massachusetts Institute of Technology**, Cambridge, MA

Feb 2021 – May 2026

- Ph.D., Information Technology
- Advisor: Prof. Thomas W. Malone
- Grade: 5.0/5.0

**Seoul National University**, Seoul, South Korea

Mar 2016 – Feb 2021

- B.B.A., Business Administration
- Minor in Computer Science and Engineering
- Grade: Summa Cum Laude

## PUBLICATIONS

### JOURNAL & CONFERENCE PAPERS

- [1] J. Song, Z. Ashktorab, T. Malone, **Togedule: Adaptive Representation of Group Availability Using Large Language Models for Scheduling Meetings**, *ACM SIGCHI Conference on Computer-Supported Cooperative Work Social Computing (CSCW 2025)*.
- [2] J. Song, Z. Ashktorab, Q. Pan, C. Dugan, W. Geyer, T. Malone, **Interaction Configurations and Prompt Guidance in Conversational AI for Question Answering in Human-AI Teams**, *ACM SIGCHI Conference on Computer-Supported Cooperative Work Social Computing (CSCW 2025)*.
- [3] S. Park, J. Song, D. Karger, T. Malone, **Who2chat: A Social Networking System for Academic Researchers in Virtual Social Hours Enabling Coordinating, Overcoming Barriers and Social Signaling**, *ACM SIGCHI Conference on Computer-Supported Cooperative Work Social Computing (CSCW 2024)*.
- [4] J. Song, C. Riedl, T. Malone, **Online Mingling: Supporting Ad Hoc, Private Conversations at Virtual Conferences**, *ACM SIGCHI Conference on Human Factors in Computing Systems 2021 (CHI 2021)*.
- [5] S. Lee, J. Song, S. Park, J. Kim, J. Kim, E. Ko, **SolutionChat: Real-time Moderator Support for Chat-based Structured Discussion**, *ACM SIGCHI Conference on Human Factors in Computing Systems 2020 (CHI 2020)*.
- [6] D. Shin, J. Song, S. Song, J. Park, J. Lee, S. Jun, **TalkingBoogie: Collaborative Mobile AAC System for Non-verbal Children with Developmental Disabilities and Their Caregivers**, *ACM SIGCHI Conference on Human Factors in Computing Systems 2020 (CHI 2020)*.

- [7] J. Song and C. Kim, **What Is Needed for the Sustainable Success of Open Source Software Projects: Efficiency Analysis of Commit Production Process via Git**, *Sustainability*, vol. 10, no. 9, Aug 2018.

#### MANUSCRIPTS UNDER REVIEW

- [8] J. Song\*, B. Luttges\*, M. Alsobay, D. Goldstein, **Forecasting with LLMs: A Dataset for Rapid Backtesting Without Temporal Contamination**. *Under Review*.
- [9] J. Song, A. Vossoughi\*, H. Zhang\*, D. Lee, **The Generative AI Divide: A Descriptive Analysis of Heterogeneous Adaptation Among Knowledge Contributors**. *Under Revision*.
- [10] J. Song, S. Park, T. Malone, **Designing for Effortful AI: The Efficiency-Learning Dilemma in AI-Assisted Note-Taking**. *Under Review*.

#### WORKING PAPERS

- [11] A. Campero\*, M. Vaccaro\*, J. Song, H. Wen, A. Almaatouq, T. Malone, **A Test for Evaluating Performance in Human-AI Systems**, *MIT Working Paper*, 2022.
- [12] J. Song, J. Heyman, M. Vaccaro, A. Cai, A. Almaatouq, T. Malone, **How Human-AI Synergy Changes as AI Technology Advances: A Case of Writing Short Stories**. *Work in Progress*.
- [13] M. Vaccaro, J. Song, A. Almaatouq, M. Bakker, **The Case for Harmful Capability Uplift: Why AI Safety Evaluation Must Focus on Human-AI Systems**. *Work In Progress*.

#### POSTERS

- [14] J. Song\*, K. Choe\*, J. Jo, and J. Seo, **SoundGlance: Briefing the Glanceable Cues of Web Pages for Screen Reader Users**, *ACM SIGCHI Conference on Human Factors in Computing Systems (CHI 2019 Late Breaking Work)*, ACM, New York, NY, USA, May 2019.

#### RESEARCH EXPERIENCE

<b>Microsoft Research</b> , New York, NY	2025
▪ Research Intern	
<b>Bosch Research</b> , Sunnyvale, CA	2024
▪ Research Intern	
<b>Adobe Research</b> , San Jose, CA	2023
▪ Research Intern	
<b>Kixlab</b> , KAIST	2018 – 2019
▪ Undergraduate Research Intern	
▪ Project: Real-time Moderator Support for Chat-based Structured Discussion	
▪ Advisor: Prof. Juho Kim	
<b>HCI Lab</b> , Seoul National University	2018
▪ Undergraduate Research Intern	
▪ Project: Briefing the Glanceable Cues of Web Pages for Screen Reader Users	
▪ Advisor: Prof. Jinwook Seo	

<b>TEACHING EXPERIENCE</b>	<b>Graduate Teaching Assistant</b> , MIT Sloan School of Management	2026 (Expected)
	<ul style="list-style-type: none"> <li>Course: 15.S04 - Generative AI Lab: Action Learning Seminar on Generative AI, its Applications, and the Digital Economy</li> </ul>	
	<b>Graduate Teaching Assistant</b> , MIT Sloan School of Management	Sep 2025 – Dec 2025
	<ul style="list-style-type: none"> <li>Course: 15.572 - Analytics Lab (Action Learning Seminar on Analytics, Machine Learning, and the Digital Economy)</li> <li>Led recitations on large language models. Assisted student teams in applying analytics to solve challenges for partner companies.</li> </ul>	
	<b>Guest Lecture</b> , Seoul Institute of the Arts	Nov 2023
	<ul style="list-style-type: none"> <li>Delivered a virtual seminar as an invited speaker via Zoom webinar.</li> <li>Developed a design thinking workshop centered on conceptualizing a group scheduling tool.</li> </ul>	
	<b>Graduate Teaching Assistant</b> , MIT CSAIL	Sep 2022 – Dec 2022
	<ul style="list-style-type: none"> <li>Course: 6.1040 - Software Studio</li> <li>Led recitations on web technologies (e.g., Vue.js, Node.js, MongoDB, and Socket.IO)</li> <li>Average Evaluation Rating: 6.0/7.0</li> </ul>	
	<b>Next Jump Innovation Prize</b> , MIT Web Lab Competition	2022
	<ul style="list-style-type: none"> <li>Built a 3rd place web service among 300+ MIT students; awarded \$3,500</li> </ul>	
<b>AWARDS &amp; HONORS</b>	<b>Special Recognition for Outstanding Reviews</b> , ACM CHI 2023	2022
	<ul style="list-style-type: none"> <li>Recognition for the paper reviews</li> </ul>	
	<b>Gary Marsden Travel Award</b> , ACM SIGCHI	2022
	<ul style="list-style-type: none"> <li>Travel grant for attending UIST 2022</li> </ul>	
	<b>Graduate School Fellowship</b> , MIT Sloan School of Management	2021 – Present
	<ul style="list-style-type: none"> <li>Received full departmental funding for graduate studies</li> </ul>	
	<b>Honorable Mention Award</b> , ACM SIGCHI	2020
	<ul style="list-style-type: none"> <li>Recognized among the top 5% of paper submissions</li> </ul>	
	<b>Yangyoung Foundation Scholarship</b> , South Korea	2018 – 2020
	<ul style="list-style-type: none"> <li>Awarded a merit-based scholarship during undergraduate studies</li> </ul>	
	<b>International Samsung AI Challenge, Final Round Award</b> , Samsung Research	2018
	<ul style="list-style-type: none"> <li>Developed a personalized restaurant recommender system with collaborative filtering using restaurants rating and text review data</li> </ul>	
	<b>Samsung Convergence Software Course Scholarship</b> , South Korea	2018
	<ul style="list-style-type: none"> <li>Earned a scholarship for successfully completing the Samsung Convergence Software Course</li> </ul>	
	<b>Merit-based Scholarship</b> , Seoul National University	2016 – 2017
	<ul style="list-style-type: none"> <li>Received a merit-based scholarship during undergraduate studies.</li> </ul>	

ACADEMIC SERVICE	<b>Reviewer</b>	
	<ul style="list-style-type: none"> <li>▪ ACM CSCW</li> <li>▪ ACM CHI</li> </ul>	2022, 2023, 2025 2023, 2024
MENTORSHIP	▪ <b>Riki Choi</b> , Undergraduate Student at Boston University	2025 – Present
	▪ <b>Thomas Shin</b> , Undergraduate Student at Boston University	2025 – Present
	▪ <b>Arman Vossoughi</b> , Undergraduate Student at Boston University	2024 – Present
	▪ <b>Hongzun Zhang</b> , Masters Student at Boston University	2024 – Present
	▪ <b>Caitlin Ogoe</b> , Undergraduate Student at MIT	2022 – 2024
	▪ <b>Alice Cai</b> , Undergraduate Student at Harvard University	2021 – 2023
	▪ <b>Eve Silfanus</b> , Undergraduate Student at Wellesley University	2021 – 2022
	▪ <b>Michelle Minsol Kim</b> , Undergraduate Student at Wellesley University	2021 – 2022
DOCTORAL COURSEWORK	▪ Applied Machine Learning (6.862), MIT	
	▪ Quantitative Methods for Natural Language Processing (6.8610), MIT	
	▪ Advances in Computer Vision (6.869), MIT	
	▪ LLM Agents and Multi-Agent Systems (QST911), Boston University	
	▪ Research Seminar in IT and Organizations: Economic Perspectives (15.575), MIT	
	▪ Quantitative Research Methods (17.800), MIT	
	▪ Interactive Data Visualization (6.C85), MIT	
SKILLS	▪ <b>JavaScript</b> (React.js, D3.js, React Native, Apollo.js, Express.js, etc.)	
	▪ <b>Web Technologies</b> (MongoDB, Ruby on Rails, PostgresQL, etc.)	
	▪ <b>Python</b> (LangGraph, AutoGen, vLLM, etc.)	
	▪ <b>Large language models</b> (Fine-tuning, Retrieval-Augmented Generation, etc.)	
	▪ <b>Experiment design &amp; Statistical methods</b> (Clustering, Topic Modeling, etc.)	