Jaeyoon Song

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INTERESTS

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

EDUCATION

Massachusetts Institute of Technology, Cambridge, MA

■ Ph.D., Information Technology

Feb 2021 - May 2026

M.S., Management Research

May 2024

• 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, <u>J. Song</u>, 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

Microsoft Research, New York, NY

2025

• Research Intern

Bosch Research, Sunnyvale, CA

2024

Research Intern

Adobe Research, San Jose, CA

2023

• Research Intern

Kixlab, KAIST 2018 – 2019

- Undergraduate Research Intern
- Project: Real-time Moderator Support for Chat-based Structured Discussion
- Advisor: Prof. Juho Kim

HCI Lab, Seoul National University

2018

- Undergraduate Research Intern
- Project: Briefing the Glanceable Cues of Web Pages for Screen Reader Users
- Advisor: Prof. Jinwook Seo

TEACHING
EXPERIENCE

Graduate Teaching Assistant, MIT Sloan School of Management

2026 (Expected)

 Course: 15.S04 - Generative AI Lab: Action Learning Seminar on Generative AI, its Applications, and the Digital Economy

Graduate Teaching Assistant, MIT Sloan School of Management

Sep 2025 – Dec 2025

- Course: 15.572 Analytics Lab (Action Learning Seminar on Analytics, Machine Learning, and the Digital Economy)
- Led recitations on large language models. Assisted student teams in applying analytics to solve challenges for partner companies.

Guest Lecture, Seoul Institute of the Arts

Nov 2023

- Delivered a virtual seminar as an invited speaker via Zoom webinar.
- Developed a design thinking workshop centered on conceptualizing a group scheduling tool.

Graduate Teaching Assistant, MIT CSAIL

Sep 2022 – Dec 2022

- Course: 6.1040 Software Studio
- Led recitations on web technologies (e.g., Vue.js, Node.js, MongoDB, and Socket.IO)
- Average Evaluation Rating: 6.0/7.0

AWARDS & HONORS

Next Jump Innovation Prize, MIT Web Lab Competition

2022

Built a 3rd place web service among 300+ MIT students; awarded \$3,500

Special Recognition for Outstanding Reviews, ACM CHI 2023

2022

• Recognition for the paper reviews

Gary Marsden Travel Award, ACM SIGCHI

2022

Travel grant for attending UIST 2022

Graduate School Fellowship, MIT Sloan School of Management

2021 - Present

Received full departmental funding for graduate studies

Honorable Mention Award, ACM SIGCHI

2020

• Recognized among the top 5% of paper submissions

Yangyoung Foundation Scholarship, South Korea

2018 - 2020

Awarded a merit-based scholarship during undergraduate studies

International Samsung AI Challenge, Final Round Award, Samsung Research

Developed a personalized restaurant recommender system with collaborative filtering using restaurants rating and text review data

Samsung Convergence Software Course Scholarship, South Korea

2018

2018

• Earned a scholarship for successfully completing the Samsung Convergence Software Course

Merit-based Scholarship, Seoul National University

2016 - 2017

Received a merit-based scholarship during undergraduate studies.

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ACADEMIC SERVICE

MENTORSHIP

Reviewer

ACM CSCW

■ ACM CHI	2023, 2024
■ Riki Choi, Undergraduate Student at Boston University	2025 – Present
■ Thomas Shin, Undergraduate Student at Boston University	2025 – Present
 Arman Vossoughi, Undergraduate Student at Boston University 	2024 – Present
 Hongzun Zhang, Masters Student at Boston University 	2024 – Present
 Caitlin Ogoe, Undergraduate Student at MIT 	2022 - 2024
 Alice Cai, Undergraduate Student at Harvard University 	2021 – 2023
■ Eve Silfanus, Undergraduate Student at Wellesley University	2021 - 2022

2022, 2023, 2025

2021 - 2022

DOCTORAL COURSEWORK

- Applied Machine Learning (6.862), MIT
- Quantitative Methods for Natural Language Processing (6.8610), MIT

• Michelle Minsol Kim, Undergraduate Student at Wellesley University

- 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

- **JavaScript** (React.js, D3.js, React Native, Apollo.js, Express.js, ...)
- Web Technologies (MongoDB, Ruby on Rails, PostgresQL, ...)
- Python, LangGraph, AutoGen, vLLM, ...
- Large language models (Fine-tuning, Retrieval-Augmented Generation, ...)
- Experiment design & Statistical methods (Clustering, Topic Modeling, ...)