

# Jaeyoon Song

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## INTERESTS

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

## EDUCATION

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

Feb 2021 – May 2026

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

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

Feb 2021 – May 2024

- M.S., Management Research
- GPA: 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
- Graduated *Summa Cum Laude*

## SKILLS

- **Python**, pandas, scikit-learn, AutoGen, Retrieval-Augmented Generation (RAG), Fine-Tuning
- **Experiment Design & Statistical Methods**: Clustering, Topic Modeling, A/B Testing
- **Web Technologies**: JavaScript (React, D3, React Native, Express), MongoDB

## RESEARCH

**Microsoft Research**, New York, NY

2025

## EXPERIENCE

- Research Intern

- Developed a backtestable evaluation framework for assessing LLM forecasting accuracy while eliminating temporal contamination.
- Implemented an automated retrieval-augmented generation (RAG) pipeline that synthesized web search data into structured summaries.
- Advisor: Dr. Dan Goldstein

**Bosch Research**, Sunnyvale, CA

2024

- Research Intern
- Designed a visual analytics system for interpreting dynamic factors in driving videos.
- Implemented Meta SAM 2 and LLM-driven inference pipelines on driving video datasets to automatically generate dynamic factor masks.
- Advisor: Dr. Jiajing Guo

**Adobe Research**, San Jose, CA

2023

- Research Intern

**KAIST Interaction Lab**, KAIST

2018 – 2019

- Undergraduate Research Intern

**Human-Computer Interaction Lab**, Seoul National University

2018

- Undergraduate Research Intern

**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 (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 (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 (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, (2018): 3001.

**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 at ICLR 2026*.
- [9] J. Song, A. Vossoughi\*, H. Zhang\*, D. Lee, **The Generative AI Divide: A Descriptive Analysis of Heterogeneous Adaptation Among Knowledge Contributors**. *Under Revision at CSCW 2026*.

**WORKING PAPERS**

- [10] 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.

[11] 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*.

[12] 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

[13] 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)*.

AWARDS & HONORS		
	<b>Next Jump Innovation Prize</b> , MIT Web Lab Competition	2022
	▪ Built a 3rd place web service among 300+ MIT students; awarded \$3,500	
	<b>Special Recognition for Outstanding Reviews</b> , ACM CHI 2023	2022
	▪ Recognized for outstanding paper reviews	
	<b>Gary Marsden Travel Award</b> , ACM SIGCHI	2022
	▪ Travel grant for attending UIST 2022	
	<b>Graduate School Fellowship</b> , MIT Sloan School of Management	2021 – Present
	▪ Received full departmental funding for graduate studies	
	<b>Honorable Mention Award</b> , ACM SIGCHI	2020
	▪ Recognized among the top 5% of paper submissions	
	<b>Yangyoung Foundation Scholarship</b> , South Korea	2018 – 2020
	▪ Awarded a merit-based scholarship during undergraduate studies	
	<b>International Samsung AI Challenge, Final Round Award</b> , Samsung Research	2018
	▪ Developed a personalized restaurant recommender system using collaborative filtering based on restaurant ratings and review text data	
	<b>Samsung Convergence Software Course Scholarship</b> , South Korea	2018
	▪ Earned a scholarship for successfully completing the Samsung Convergence Software Course	
	<b>Merit-based Scholarship</b> , Seoul National University	2016 – 2017
	▪ Received a merit-based scholarship during undergraduate studies.	
DOCTORAL COURSEWORK		
	▪ Applied Machine Learning (6.862), MIT	
	▪ Quantitative Methods for Natural Language Processing (6.8610), MIT	
	▪ LLM Agents and Multi-Agent Systems (QST 911), Boston University	
	▪ Advances in Computer Vision (6.869), MIT	
	▪ Quantitative Research Methods (17.800), MIT	
	▪ Interactive Data Visualization (6.C85), MIT	
	▪ Research Seminar in IT and Organizations: Economic Perspectives (15.575), MIT	

<b>ACADEMIC SERVICE</b>	<b>Reviewer</b>	
	▪ ACM CSCW	2022, 2023, 2025
	▪ ACM CHI	2023, 2024
<b>MENTORSHIP</b>	▪ <b>Riki Choi</b> , Undergraduate Student at Boston University ▪ <b>Thomas Shin</b> , Undergraduate Student at Boston University ▪ <b>Arman Vossoughi</b> , Undergraduate Student at Boston University ▪ <b>Hongzun Zhang</b> , Master's Student at Boston University ▪ <b>Caitlin Ogoe</b> , Undergraduate Student at MIT ▪ <b>Alice Cai</b> , Undergraduate Student at Harvard University ▪ <b>Eve Silfanus</b> , Undergraduate Student at Wellesley College ▪ <b>Michelle Minsol Kim</b> , Undergraduate Student at Wellesley College	2025 – Present 2025 – Present 2024 – Present 2024 – Present 2022 – 2024 2021 – 2023 2021 – 2022 2021 – 2022
<b>TEACHING EXPERIENCE</b>	<b>Graduate Teaching Assistant</b> , 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	
	<b>Graduate Teaching Assistant</b> , 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. ▪ Average Evaluation Rating: 7.0/7.0	
	<b>Guest Lecture</b> , Seoul Institute of the Arts	Nov 2023
	▪ Delivered a virtual seminar as an invited speaker via Zoom. ▪ Developed a design thinking workshop centered on conceptualizing a group scheduling tool.	
	<b>Graduate Teaching Assistant</b> , 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	
<b>OTHER EXPERIENCE</b>	▪ <b>Software Engineer</b> , BigPearl ▪ <b>Featured Chrome Extension on Chrome Web Store</b> – Reached over 2,000 users ▪ <b>A 3D Rotating Cube</b> , <a href="https://jaeyoon.io/cube">https://jaeyoon.io/cube</a> – Developed an interactive 3D visualization	2017 2022 2017