

Hye Sun Yun

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EDUCATION

Northeastern University <i>Ph.D. in Computer Science</i> Advisors: Byron C. Wallace and Timothy Bickmore Expected Graduation: Spring 2026	2020–Present Boston, MA
Northeastern University <i>M.S. in Computer Science</i>	2022 Boston, MA
Wellesley College <i>B.A. in Computer Science and Africana Studies</i> Magna Cum Laude; Phi Beta Kappa	2013–2017 Wellesley, MA

TEACHING EXPERIENCE

Instructor of Record

Northeastern University <i>DS2500 - Intermediate Programming with Data</i> (Co-instructor with Deahan Yu) <ul style="list-style-type: none">• Taught 1 lecture section• Developed syllabus, homeworks, and project requirements for all 4 sections (242 students) and managed 15 TAs	Fall 2025
<i>CS4983/6983 - Research in Human-Centered NLP</i> <ul style="list-style-type: none">• Taught a special topics lecture section with 10 students• Designed 4 lab sessions	Spring 2025

Teaching Assistant

Northeastern University <i>CS3950 - Introduction to CS Research</i> <ul style="list-style-type: none">• Held office hours to support student assignments and projects• Taught a lecture on “Ethics in Research”• Organized a PhD student panel for lecture• Graded assignments	Fall 2024
Wayfair <i>Quality Assurance to Quality Engineer Program</i> <ul style="list-style-type: none">• Taught 3 lecture sessions on the topic of database management and basics in programming	Fall 2019
<i>MVC Framework Course</i> <ul style="list-style-type: none">• Taught monthly hands-on workshop to new 20~30 software engineer hires on MVC framework in PHP	2019–2020
Wellesley College <i>CS320 - Tangible User Interfaces</i> <ul style="list-style-type: none">• Held office hours for homework assignment and project assistance• Graded assignments	Fall 2016
<i>CS235 - Languages & Automata</i> <ul style="list-style-type: none">• Held 1-1 tutoring sessions on writing proofs as a peer tutor	Fall 2016

CS231 - *Algorithms*

Spring 2016

- Held office hours for homework assignment assistance
- Graded assignments

JPN101,102 - *Beginning Japanese*

2014–2015

- Held weekly conversation practice sessions for ~10 students

Guest Lectures

Virtual Agents for Health Behavior Change

Fall 2022

Course: CS3950 Introduction to CS Research, **Northeastern University**

RESEARCH INTERESTS

Natural Language Processing, Human-Computer Interaction, Responsible AI, Healthcare, Public Health

PUBLICATIONS

Peer-Reviewed Conference Papers

1. **Hye Sun Yun**, Karen Y.C. Zhang, Ramez Kouzy, Iain J. Marshall, Junyi Jessy Li, & Byron C. Wallace. [“Caught in the Web of Words: Do LLMs Fall for Spin in Medical Literature?”](#) In *Proceedings of Conference on Health, Inference, and Learning (CHIL)*, 2025.
2. **Hye Sun Yun** & Timothy Bickmore. [“Framing Health Information: The Impact of Search Methods and Source Types on User Trust and Satisfaction in the Age of LLMs.”](#) In *Proceedings of the Extended Abstracts of the CHI Conference*, 2025.
3. **Hye Sun Yun**, David Pogrebitskiy, Iain J. Marshall, & Byron C. Wallace. [“Automatically Extracting Numerical Results from Randomized Controlled Trials with Large Language Models.”](#) In *Proceedings of the Machine Learning for Healthcare (MLHC) Conference*, 2024.
4. Mina Fallah, Farnaz Nouraei, **Hye Sun Yun**, & Timothy Bickmore. [“Investigating User Perceptions of Collaborative Agenda Setting in Virtual Health Counseling Session.”](#) In *Proceedings of the ACM International Conference on Intelligent Virtual Agents (IVA)*, 2024.
5. **Hye Sun Yun**, Iain J. Marshall, Thomas A. Trikalinos, & Byron C. Wallace. [“Appraising the Potential Uses and Harms of LLMs for Medical Systematic Reviews.”](#) In *Proceedings of the Conference on Empirical Methods in Natural Language Processing (EMNLP)*, 2023.
6. Prasanth Murali, Ian Steenstra, **Hye Sun Yun**, Ameneh Shamekhi, & Timothy Bickmore. [“Improving Multiparty Interactions with a Robot Using Large Language Models.”](#) In *Proceedings of the Extended Abstracts of the CHI Conference*, 2023.
7. **Hye Sun Yun**, Matias Volonte, & Timothy Bickmore. [“Motivating health behavior change with a storytelling virtual agent.”](#) In *Proceedings of the ACM International Conference on Intelligent Virtual Agents (IVA)*, 2022.

Journal Articles

1. **Hye Sun Yun** & Timothy Bickmore. [“Online Health Information–Seeking in the Era of Large Language Models: Cross-Sectional Web-Based Survey Study.”](#) *Journal of Medical Internet Research (JMIR)*, Volume(27), 2025.
2. Iain J. Marshall, Thomas A. Trikalinos, Frank Soboczenski, **Hye Sun Yun**, Gregory Kell, Rachel Marshall, & Byron C. Wallace. [“In a pilot study, automated real-time systematic review updates were feasible, accurate, and work-saving.”](#) *Journal of Clinical Epidemiology*, Volume(153), 2023.

Workshop Papers

1. **Hye Sun Yun**, Shuo Zhou, Everlyne Kimani, Stefan Olafsson, Teresa K. O’Leary, Dhaval Parmar, Jessica A. Hoffman, Stephen S. Intille, Michael K. Paasche-Orlow, & Timothy Bickmore. [“Techno-spiritual Engagement: Mechanisms for Improving Uptake of mHealth Apps Designed for Church Members.”](#) In *HEALTHI at Conference on Intelligent User Interfaces (IUI)*, 2022.

Media Articles

1. Teresa K. O’Leary, Elizabeth Stowell, Darley Sackitey, **Hye Sun Yun**, David Wright, Michael K. Paasche-Orlow, Timothy Bickmore, & Andrea G. Parker. [“Church after Sunday: supporting everyday well-being through techno-](#)

spiritual health interventions.” In *ACM Interactions*, 2022.

PROFESSIONAL EXPERIENCE

Truveta

Summer 2024

AI/ML Research Intern

Remote (Seattle, WA)

Mentor: Saman Zarandioon, Mehraveh Salehi, Sadra Naddaf

- Conducted research in the field of LLMs and clinical notes investigating quality and diversity of training data for clinical concept extraction
- Explored methods to optimize a generalized clinical concept extraction LLM

Wayfair

2017–2020

Full-Stack Software Engineer/Manager

Boston, MA

- Developed and implemented features for a supplier-facing web tool, enabling efficient bulk addition of new products to the catalog
- Successfully spearheaded two major, multi-phase refactoring initiatives: frontend migration from Tungsten to React and Redux and completely rewriting the team’s Excel sheet import service
- Provided guidance and mentorship during rapid team growth, facilitating the onboarding of 10+ new hires
- Led team-wide adoption of pair programming to foster collaboration and knowledge sharing and established a program to train new code reviewers
- Managed and led a team of three software engineers, cultivating a collaborative and productive work environment, and ensuring successful project delivery

RESEARCH STUDENT MENTORING

Karen Y.C. Zhang, B.S. in Computer Science at Northeastern University

Spring–Summer 2025

Patrick Wilson, Master’s in Public Health at King’s College London

Spring–Fall 2024

David Pogrebitskiy, B.S. in Data Science at Northeastern University

Spring 2024

Nikita Salkar, M.S. in Computer Science at Northeastern University

Spring 2022

SERVICE & OUTREACH

Northeastern University Institutional Service

PhD Open House

2021 & 2024

Student Panelist & Prospective Student Buddy

Pathway to PhD Workshop

Summer 2022

PhD Student Panelist

Wellesley College Research Students’ Visit

Summer 2022

PhD Student Panelist

PhD Hiring Committee

2022

Faculty Application Reviewer

PhD CS Admissions Committee

2021

PhD Student Application Reviewer

Community Engagement

Khoury SHEROs of Color

Spring 2025

PhD Student Panelist, GitHub Workshop Instructor, & Hackathon Mentor

Queer in AI

Fall 2023

Graduate School Application Review Program Mentor

Wayfair’s Women+ in Software

2019–2020

Co-founder & Leader

Peer Reviewer

Conferences

CHI 2023 & 2025

Machine Learning for Healthcare (MLHC) 2025

Conference on Language Modeling (COLM) 2025

IEEE Virtual Reality 2025

Intelligent Virtual Agents (IVA) 2023–2025

Autonomous Agents and Multiagent Systems (AAMAS) 2023

IEEE International Symposium on Mixed and Augmented Reality (ISMAR) 2023

Journals

International Journal of Human-Computer Studies 2025

Journal of Medical Internet Research (JMIR) 2025

Cochrane Evidence Synthesis and Methods 2025

Research Synthesis Methods 2024–2025

Workshops

ACL Workshop on Human-Centered Large Language Modeling 2024

NeurIPS Workshop on Robustness in Sequence Modeling 2022

ACM Web Conference Workshop on UserNLP 2022

INVITED TALKS

"Beyond Hallucinations: Unveiling Hidden Dangers of LLMs in Health Information Access"	June 2025
Department of Computer Science, Wellesley College, <i>Wellesley, MA</i>	
"Beyond Hallucinations: Unveiling Hidden Dangers of LLMs in Health Information Access"	April 2025
School of Computing, Clemson University, <i>Clemson, SC</i>	
"Charting My CS Career Path: From Wellesley to Industry and PhD"	November 2024
Wellesley Hackathon (WHACK), <i>Wellesley, MA</i>	
"Automatically Extracting Numerical Results from RCTs with LLMs"	October 2024
Codamatrix Reading Group, <i>Boston, MA</i>	

SELECTED PRESENTATIONS

"Do LLMs Fall for Spin in Medical Literature?"	Summer 2025
Poster: CHIL, <i>Berkeley, CA</i>	
"Framing Health Information: User Trust and Satisfaction in the Age of LLMs"	Spring 2025
Poster: CHI, <i>Yokohama, Japan</i>	
"Using LLMs to Maintain User Engagement in Repeated Virtual Agent Interviews"	Fall 2024
Oral: IVA Conference, <i>Glasgow, Scotland</i>	
"Automatically Extracting Numerical Results from RCTs with LLMs"	Summer 2024
Poster: MLHC Conference, <i>Toronto, Canada</i>	
"Using Large Language Models to Reliably Diversify Questions"	Spring 2023
Poster: Cutting-Edge Connections in PhD Research, <i>Boston, MA</i>	
"Appraising the Potential Uses and Harms of LLMs for Medical Systematic Reviews"	Spring 2023
Poster: CRA-WP Grad Cohort for Women, <i>San Francisco, CA</i>	
"Motivating Health Behavior Change with a Storytelling Virtual Agent"	Spring 2023
Poster: Khoury College PhD Open House, <i>Boston, MA</i>	
"Motivating Health Behavior Change with a Storytelling Virtual Agent"	Fall 2022
Poster: ACM IVA, <i>Faro, Portugal</i>	

“Techno-spiritual Engagement: Mechanisms for Improving Uptake of Church mHealth Apps” Spring 2022
 Oral: ACM IUI HEALTHI Workshop, *Remote*

“Longitudinal Analysis of African American Vaccine Attitudes on Social Media” with Silvio Amir Fall 2021
 Oral: PRISM Health Symposium, *San Francisco, MA* [Best Rapid-Fire Presentation Award]

PRESS

[“Dr. Google Starts Sharing Regular Folks’ Advice As Chatbots Loom”](#) by Michael L. Millenson. *Forbes*, May 2025

PROFESSIONAL DEVELOPMENT

Graduate Postsecondary Teaching Certificate Program Northeastern University, <i>Boston, MA</i>	2024–Present
Consortium for the Science of Sociotechnical Systems (CSST) Summer Research Institute CSST, <i>Syracuse University</i>	Summer 2025
National Research Mentoring Network’s Research Mentor Training NRMN – Northeastern University, <i>Boston, MA</i>	Summer 2024
CRA-WP Grad Cohort for Women CRA-WP, <i>San Francisco, CA</i>	Spring 2023
ACL Year-Round Mentorship ACL, <i>Remote</i>	2022

SKILLS

Tools/Platforms: Git, HuggingFace, Pytorch, Azure, GCP, Docker, Weights & Biases, Prolific
Libraries/Frameworks: Pytorch, HuggingFace, Node.js, REST API, Flask, .NET Core
Front-end: React, Redux, Vue.js, HTML5, CSS, SASS, Jekyll
Databases: MySQL, SQLite, PostgreSQL, MS SQL Server
Programming: Python, Java, Javascript, C#, SQL, R, \LaTeX , Shell, PHP, C
Human Languages: Korean and English (bilingual), Japanese (beginner), Swahili (novice)

Last updated: August 2, 2025