

Hye Sun Yun

Curriculum Vitae

(last updated November 27, 2022)

PhD Student at Northeastern University
Khoury College of Computer Sciences
Boston, MA, USA

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🌐 hyesunyun.github.io

EDUCATION

PhD in Computer Science **2020-Present**

Northeastern University, Boston, MA

Advised by Timothy Bickmore and Byron Wallace

B.A. in Computer Science and Africana Studies, *magna cum laude* **2013-2017**

Wellesley College, Wellesley, MA

RESEARCH EXPERIENCE

Research Assistant **2020-Present**

Northeastern University, Boston, MA

- Conducted research in the fields of HCI and NLP co-advised by Timothy Bickmore and Byron Wallace
- In-progress work on HCI research to promote healthy behaviors for historically Black church members using an mHealth application with a conversational virtual agent by exploring ways to increase engagement and use through notifications and storytelling.
- In-progress work on enhancing patient-reported outcomes for individual use through embodied conversational agents.
- In-progress work on NLP multi-document summarization research to improve and update systematic reviews of biomedical literature to help medical professionals make better clinical and policy decisions.

REU Undergraduate Researcher **2016**

University of Houston - Computational Biomedicine Lab, Houston, TX

- Completed an NSF-funded 10 week research program at the University of Houston under the supervision of Professor Ioannis A. Kakadiaris.
- Co-authored a literature review on anti-spoofing techniques for face recognition in computer vision systems.
- Compared how spoofing affects the accuracy of different face recognition systems.

PROFESSIONAL EXPERIENCE

Software Engineer/Engineering Manager **2017-2020**

Wayfair, Boston, MA

- Contributed to building new features for the supplier-facing web tool for adding new products to the catalog in bulk.
- Led 2 large, multi-phase refactoring projects -- a conversion of the frontend from Tungsten to React and Redux and the rewriting of my team's Excel sheet import service.
- As the most senior engineer on the team, I have guided and mentored my team through the addition of 10+ new hires.
- Led larger team effort to incorporate pair programming as part of development work and led a program to train more code reviewers on the team.
- Gave department and team-wide talks on creating reusable Redux components and Jest testing.
- Leading and managing a team of 3 engineers.

TEACHING EXPERIENCE

Teaching Assistant for MVC Class

2019-2020

Wayfair, Boston, MA

- Assisted students during the hands-on activities during Wayfair's onboarding MVC framework class, once every 3 months.
- Answered questions online and in-person about MVC framework at Wayfair.

Quality Assurance to Quality Engineer Program Instructor

2019

Wayfair, Boston, MA

- Led 4 department-wide sessions on SQL and Introduction to Programming in PHP.

Wayfair Labs Mentor

2019

Wayfair, Boston, MA

- Co-mentored 30 entry-level engineers on their first month's full stack project.
- Provided constant technical feedback through code reviews and conversations during weekly drop-in hours.

Peer Tutor and Grader

2014-2016

Pforzheimer Learning and Teaching Center -- Wellesley College, Wellesley, MA

- Spring 2016 | **CS 231 Algorithms** | Held weekly group tutoring sessions and graded homework. Contributed to weekly calibration meetings and teaching pedagogy discussions with the professor and fellow tutors/graders.
- Fall 2016 | **CS 320 Tangible User Interface** | Held weekly drop-in hours.
- Fall 2016 | **CS 235 Languages & Automata** | Held 1-1 tutoring and review sessions for CS235.
- Fall 2014 & Spring 2015 | **JPN 101 & 102 Beginning Japanese** | Held weekly drop-in sessions to help students with their oral exercises and written homework.

PUBLICATIONS

Iain J. Marshall, Thomas A. Trikalinos, Frank Soboczenski, **Hye Sun Yun**, Gregory Kell, Rachel Marshall, Byron C. Wallace. 2022. **In a pilot study, automated real-time systematic review updates were feasible, accurate, and work-saving.** *Journal of Clinical Epidemiology*.
<https://doi.org/10.1016/j.jclinepi.2022.08.013>

Hye Sun Yun, Matias Volonte, and Timothy Bickmore. 2022. **Motivating health behavior change with a storytelling virtual agent**. In Proceedings of the 22nd ACM International Conference on Intelligent Virtual Agents (IVA '22). Association for Computing Machinery, New York, NY, USA, Article 31, 1–3. <https://doi.org/10.1145/3514197.3549684>

Teresa K. O’Leary, Elizabeth Stowell, Darley Sackitey, **Hye Sun Yun**, David Wright, Michael Paasche-Orlow, Timothy Bickmore, and Andrea G. Parker. June 2022. **Church after Sunday: supporting everyday well-being through techno-spiritual health interventions**. In ACM Interactions 29 (4). 4 pages. <https://doi.org/10.1145/3542838>

Hye Sun Yun, Shuo Zhou, Everlyne Kimani, Stefan Olafsson, Teresa K. O'Leary, Dhaval Parmar, Jessica Hoffman, Stephen Intille, Michael Paasche-Orlow, and Timothy Bickmore. 2022. **Techno-spiritual Engagement: Mechanisms for Improving Uptake of mHealth Apps Designed for Church Members**. In Joint Proceedings of the ACM IUI 2022 Workshops. Helsinki, Finland, 9 pages. <http://ceur-ws.org/Vol-3124/paper13.pdf>

PRESENTATIONS

ACM IUI HEALTHI Workshop **2022**
“Techno-spiritual Engagement: Mechanisms for Improving Uptake of mHealth Apps Designed for Church Members”

PRISM Health Symposium **2021**
“Longitudinal Analysis of the Attitudes and Conversations Surrounding Vaccines by African Americans on Social Media”

GRANTS AWARDED

Global Engagement Internship/Grant, Wellesley College **2015**
Wellesley College’s Center for Work and Service grant for global summer internships (\$5,000)

- Interned at Asian Rural Institute (Japan) for 10 weeks with the grant.

ACADEMIC MEMBERSHIP

Phi Beta Kappa Society (ΦBK)

AWARDS

1st Wayfair Supplier DIY Innovation Day Winner - *Dolly Project Cloner* **2019**
Wayfair Challenge Day Runner-Up - *Wayfair en Español* **2018**

ACADEMIC SERVICE/VOLUNTEER

Conference on Autonomous Agents and Multiagent Systems Paper Sub-reviewer <i>AAMAS 2023</i>	2022
Khoury College of Computer Science Faculty Application Student Reviewer <i>Northeastern University, Boston, MA</i>	2022
CHI Health Subcommittee Paper Reviewer <i>CHI 2023</i>	2022
Workshop on Robustness in Sequence Modeling Paper Reviewer <i>NeurIPS 2022</i>	2022
Khoury College - Pathway to PhD Workshop Panelist <i>Northeastern University, Boston, MA</i>	August 23, 2022
PhD Student Application Reviewer <i>Northeastern University, Boston, MA</i>	2021
Women+ in Software Lead <i>Wayfair, Boston, MA</i> <ul style="list-style-type: none">Helped organize the formation of the employee resource group and worked on organizing the kickoff event.Represented the group when attending company's ERG-related meetings.	2019-2020

PROGRAM COMMITTEE

UserNLP: User-centered Natural Language Processing Workshop	2022
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ACTIVITIES

ACL Year-Round Mentorship <i>Class of 2022 mentee</i>	2022
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