HYEONJEONG BYEON

✉ hjbyeon@uw.edu
🌐 https://hyeonjeongbyeon.com

RESEARCH INTERESTS

Human-AI Interaction, Social Computing, Conversational Agents, Health Data

EDUCATION

University of Washington — Seattle, WA
Ph.D., Human Centered Design & Engineering — 2023 - Present
Advised by Prof. Gary Hsieh & Prof. Sean A. Munson

Ewha Womans University — Seoul, Korea
B.S., Computer Science & Engineering, Minor in Statistics — 2019 - 2023

University of Toronto — Toronto, Canada
Undergraduate Exchange Program — 2021 - 2021

RESEARCH EXPERIENCES

Intentional Traces Collective Lab, University of Washington — Jan 2024 - Present
Graduate Research Assistant (PI: Prof. Sean A. Munson)
- Client–Clinician Match: Explored opportunities to support clinical communication and decision-making.
- AI & Bibliotherapy: Investigated identity-matching interventions, focusing on the role of personal narratives and storytelling.

Prosocial Computing Group, University of Washington — May 2023 - Present
Graduate Research Assistant (PI: Prof. Gary Hsieh)
- AI Journalism & Credibility: Working on automated journalism and credibility frameworks to support scientific communication.
- Chatbot Personas & Credibility: Examining the effects of conversational agent design on search results.

Dynamic Graphics Project Lab, University of Toronto — Sep 2021 - Sep 2022
Undergraduate Research Assistant (PI: Prof. Khai N. Truong)
- Music Accessibility: Investigated opportunities for accessible music experiences for d/Deaf individuals using song signing.

Human-Computer Interaction Lab, Ewha Womans University — Jul 2020 - Sep 2023
Undergraduate Research Assistant (PI: Prof. Uran Oh)
- Voice Personas: Developed a search engine for labeled voice persona directories and a voice customization system.
- Language Models & Patient Data: Applied bidirectional language models to classify electronic patient text data.

PUBLICATIONS

Conference Papers

[c.2] Suhyeon Yoo, Georgianna Lin, **Hyeonjeong Byeon**, Amy Hwang, and Khai Truong. 2023. Understanding tensions in music accessibility through song signing for and with d/Deaf and Non-d/Deaf persons. In *Proceedings of the CHI Conference on Human Factors in Computing Systems (CHI '23)*. [paper]

[c.1] **Hyeonjeong Byeon***, Chaerin Lee*, Jeemin Lee, and Uran Oh. 2022. "A Voice that Suits the Situation": Understanding the Needs and Challenges for Supporting End-User Voice Customization. In *Proceedings of the CHI Conference on Human Factors in Computing Systems (CHI '22)*. [paper]

Posters and Extended Abstracts

[p.4] **Hyeonjeong Byeon**, Seungjin Ha, and Uran Oh. 2023. AVOCUS: A Voice Customization System for Online Personas. In *Extended Abstracts of the 2023 CHI Conference on Human Factors in Computing Systems.* [paper]

[p.3] **Hyeonjeong Byeon**. 2021. Voice Creator: Giving Customized Voice to the Voiceless for Online Communication. In *Proceedings of the 23rd International ACM SIGACCESS Conference on Computers and Accessibility Student Research Competition (ASSETS' SRC 21).* [paper]

[p.2] **Hyeonjeong Byeon**, and Uran Oh. 2021. Comparing Performance of Pre-trained Bidirectional Language Models. In *Proceedings of HCI Korea Conference 2021.* [paper]

[p.1] **Hyeonjeong Byeon**, Soohyun Yeo, and Uran Oh. 2021. Voice Creator: A Vocal Customization Web Application Prototype. In *2021 Korea Information Processing Society Spring Conference No. 28, Vol. 1.* [paper]

GRANTS & AWARDS

Social Entrepreneurship Fellow April 2025
Population Health Initiative, Leading the Virtual Study Assistant for Potential Research Participants Project

Principal Candidate, Fulbright Graduate Student Program Award Sep 2023
Korean-American Educational Commission, awarded up to $80,000 for graduate studies *(declined)*

Finalist, Doctoral Study Abroad Scholarship Aug 2023
Korean Foundation for Advanced Studies (KFAS), selected as a finalist

ITRC Student Creative Research Project March 2022 - Dec 2022
South Korean Ministry of Science and ICT, awarded $7,600 of research grant

Capstone Poster Session Presentation Dec 2022
Ewha Womans University, 2nd place in Computer Science department, co-awarded $570

SW Entrepreneurship Competition Nov 2022
Ewha Womans University, 4th place, co-awarded $75

Google Student Travel Grants May 2022
Google, awarded $2,820 for attending ACM CHI 2022

Ewha Future Design Scholarship Dec 2022, April 2022
Ewha Womans University, awarded $3,240 for excellence in career path planning

3rd place (Bronze Medal), Student Research Competition Oct 2021
ACM SIGACCESS Conference on Computers and Accessibility (ASSETS' 21)
Student Research Competition, awarded $200

Presidential Science Scholarship June 2021
Korea Student Aid Foundation (KOSAF), awarded cost of attendance for 2 years
Additional $2,200 per semester for academic excellence

Best Paper Award Jan 2021
Proceedings of HCI Korea Conference 2021, Seoul, South Korea

Undergraduate Research Opportunity Program Research Grant April 2022, June 2020
Ewha Womans University, awarded $250, $450 respectively

HOKMA Career Path Exploration Scholarship Grant Oct 2019
Ewha Womans University, co-awarded $1,100 for excellence in CS career path exploration activities

PATENT

Systems and Methods for Customizing Voices for Personas in Virtual Spaces   Dec 2022
Uran Oh, **Hyeonjeong Byeon**, Seungjin Ha, 10-2022-0179981. *Patent pending.*

AVOTAR: A Voice Customization System for Online Personas   Nov 2022
Uran Oh, **Hyeonjeong Byeon**, Seungjin Ha, South Korea, P2022-0160KR. *Patent pending.*

TEACHING EXPERIENCE

Designing For Behavior Change (HCDE 538)   Spring 2025
Graduate Teaching Assistant; facilitated design sprints

Usability Studies (HCDE 517)   Winter 2025
Graduate Teaching Assistant; mentored 10 project groups through a quarter-long usability study

Introduction to User Research (HCDE 313)   Autumn 2024
Graduate Teaching Assistant; guided students in planning user research and writing research reports

User Experience Prototyping Techniques (HCDE 451)   Spring 2024
Graduate Teaching Assistant; created tutorial videos on prototyping techniques and provided feedback on prototyping reports

SERVICE

Review Service   2024 -
ACM CHI (2025), ACM CHI Late-Breaking Work (2024, 2025)

Student Admission Reviewer   Dec 2023
Participated as a student reviewer for UW HCDE Ph.D. admission

Student Volunteer, The Blue Tree Foundation (NGO)   Feb 2022 - Feb 2022
Researched and translated articles about school violence and cyberbullying for campaigns

Member, EDOC (Ewha DO Coding)   Jan 2020 - Jun 2020
Prepared for ACM-ICPC and participated in group study sessions focusing on data structures and algorithms

Student Volunteer, Seoul Metropolitan Office of Education   Sep 2019 - Nov 2019
Taught programming to North Korean defector students as part of the "Unplugged Coding" program

Member, Like Lion   Mar 2019 - Dec 2019
Completed a year-long full-stack development course.
Back-end development of the university festival web application [Web Demo] *(closed)*

SKILLS

Research: Empirical studies, Statistical modeling, Inferential Statistics, Survey, Prototyping

Programming: Python, C/C++, Java, HTML/CSS, JavaScript

Data analysis: R, SAS, SQL