

## RESEARCH INTERESTS

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Human-AI Interaction, Conversational Agents, Communication, Behavior Change, and Multi-modal Health Data

## EDUCATION

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<b>University of Washington</b> Ph.D., Human Centered Design & Engineering Advised by Prof. Gary Hsieh & Prof. Sean A. Munson	Seattle, WA 2023 - Present
<b>Ewha Womans University</b> B.S., Computer Science & Engineering, Minor in Statistics	Seoul, Korea 2019 - 2023
<b>University of Toronto</b> Undergraduate Exchange Program	Toronto, Canada 2021 - 2021

## RESEARCH EXPERIENCES

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<b>Intentional Traces Collective Lab, University of Washington</b> Graduate Research Assistant (PI: Prof. Sean A. Munson) <ul style="list-style-type: none"><li>Client–Clinician Match: Explored opportunities to support clinical communication and decision-making.</li><li>AI &amp; Bibliotherapy: Investigated identity-matching interventions, focusing on the role of personal narratives and storytelling.</li></ul>	Jan 2024 - Present
<b>Prosocial Computing Group, University of Washington</b> Graduate Research Assistant (PI: Prof. Gary Hsieh) <ul style="list-style-type: none"><li>AI Journalism &amp; Credibility: Working on automated journalism and credibility frameworks to support scientific communication (in collaboration with Prof. Lucy Lu Wang).</li><li>Chatbot Personas &amp; Credibility: Examining the effects of conversational agent design on search results.</li></ul>	May 2023 - Present
<b>Dynamic Graphics Project Lab, University of Toronto</b> Undergraduate Research Assistant (PI: Prof. Khai N. Truong) <ul style="list-style-type: none"><li>Music Accessibility: Investigated opportunities for accessible music experiences for d/Deaf individuals using song signing.</li></ul>	Sep 2021 - Sep 2022
<b>Human-Computer Interaction Lab, Ewha Womans University</b> Undergraduate Research Assistant (PI: Prof. Uran Oh) <ul style="list-style-type: none"><li>Voice Personas: Developed a search engine for labeled voice persona directories and a voice customization system.</li><li>Language Models &amp; Patient Data: Applied bidirectional language models to classify electronic patient text data.</li></ul>	Jul 2020 - Sep 2023

## PUBLICATIONS

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### 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

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- 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

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- 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

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### Introduction to User Research (HCDE 313)

Autumn 2024

Graduate Teaching Assistant; provided guidance on writing user research reports and graded assignments

### User Experience Prototyping Techniques (HCDE 451)

Winter, Spring 2024

Graduate Teaching Assistant; created tutorial videos on prototyping techniques and provided feedback on assignments

## SERVICE

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### Review Service

2024 -

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

### 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

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

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

**Data analysis:** R, SAS, SQL