Sohyeon Park

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Interests

Human-Computer Interaction, Human-Centered Computing, Extended Reality, Accessibility

Education

Ewha Womans University, Seoul, South Korea — Mar 2016 - Feb 2021

- B.S. in Computer Science and Engineering, *Magna cum laude*
- Cumulative GPA: 3.82 / 4.30 (94.7%)

Publications

[1] **Sohyeon Park*** *(Main Presenter)*, Kyungyeon Lee*, Uran Oh. Designing Product Descriptions for Supporting Independent Grocery Shopping of People with Visual Impairments. *Late-Breaking Work, Conference on Human Factors in Computing Systems 2021* (Acceptance Rate: 39.0%). [pdf] [presentation video]

[2] Soobin Park*, SeungA Chung*, **Sohyeon Park**, Kyungyeon Lee, Uran Oh. Improving Mealtime Experiences of People with Visual Impairments *The 18th International Web for All Conference* "Best Technical Paper" Nomination [pdf]

[3] SeungA Chung*, Kyungyeon Lee, **Sohyeon Park**, Uran Oh. Investigating Three-dimensional Directional Guidance With Nonvisual Feedback with Target Searching Task. *Workshop on Mobile and Pervasive Assistive Technologies 2021.* [pdf]

Preprints & Manuscripts

[4] **Sohyeon Park***, Kyulee Kim, Uran Oh. Understanding the User Preferences in the Types of Video Censorship. Submitted to: *Conference on Human Factors in Computing Systems 2022*

[5] **Sohyeon Park***, Kyulee Kim*, Uran Oh. Exploring Input Devices for Supporting Virtual Magnet Experiments for Third Grade Students. *In Progress*

Research Experience

Research Assistant, Ewha Human-Computer Interaction Lab — Jun 2020 - Present

Supervised by Dr. Uran Oh

- Conducted several research and projects regarding extended reality devices such as investigating the search behavior in virtual and mixed environments. [1, 2]
- Designed various studies on investigating the difficulties people with visual impairments (PVI) face in real life and the ways to improve their independence. [1, 2, 3]
- Studied various methods to improve the quality of education for students. [5]

Projects

Virtual Science Lab, Ewha Human-Computer Interaction Lab — Jun 2020 - Present

- Currently implementing a virtual science lab to enable collaboration between teachers and students, while interacting with various science laboratory tools using Perception Neuron.
- A national project funded by the Ministry of Education.

Understanding the Effects of Physical Interaction Types and Distance on the Performance of Target Selection Task, Ewha Human-Computer Interaction Lab — Mar 2021 - Aug 2021

- Investigated on the optimal distance of a target that is the most efficient to interact in both hand- and body-based interaction, in a mixed reality environment.
- Planning on identifying the optimal size of a target in both interaction types for future work.

Mixed Reality Newspaper [demo1] [demo2] — Fall 2021

G17618 Special Topics in Human-Computer Interaction

- Implemented a MR newspaper using Microsoft Hololens1, in order to provide newspapers for seniors who find it difficult to read digital news and to solve environment pollution.
- Combined the positive features of a physical newspaper and of a digital newspaper to provide a friendly digitized newspaper for all types of people in various age range.

Capstone Design (Graduation) Project [pdf] — Spring & Fall 2019

Supervised by: Dr. Dongbo Min

- Created an unsupervised deep learning model to remove aliasing patterns that occur when taking pictures of computer monitors using cellphones.
- Published a short paper on the Ewha academic journal.

Work Experience

AI Research Intern, Medicisoft — Mar 2020 - Aug 2020
- Created an AI model that helps predicting the number of people who are from foreign countries and diagnosed with Covid-19.
- Developed an AI recommendation system for online math education platforms, under the management of Ministry of Education. South Korea.
- Was in charge of concluding a partnership contract with an international company in China, Megvii.

QA Trainee, Ahnlab, Inc — Aug 2018 - Feb 2019
- Performed quality assurance testing on multiple operating systems such as Windows, Linux or Unix before introducing the new version of V3 products.
- Participated in developing QA automation system using Python.

Software Engineering Intern, LUXROBO — Jul 2017 - Aug 2017
- Invented and implemented various coding games for children that can be played with the company's product (MODI) using C.

Student Volunteer

ACM SIGACCESS Conference on Computers and Accessibility — Oct2021

Human Computer Interaction Korea — Jan 2021

ACM Interactive Surfaces and Spaces Conference — Nov 2020

Honors & Awards

Kiho Lee Scholarship (Academic Excellence Scholarship), Ewha Womans University — 2021

Best Technical Paper Nomination, The 18th International Web for All Conference — 2021

Outstanding Ewha Scientist Scholarship, Ewha Womans University — Spring & Fall 2021

Future Capability Development Scholarship, Ewha Womans University — 2020

Student Independent Research Competition 2nd Prize, Information Technology Research Center — 2020

Student Research Grant, Information Technology Research Center — 2020

Outstanding Employee CEO Award, Medicisoft — 2020

Dean's List, Ewha Womans University — Spring 2017, Spring 2018, Spring & Fall 2019

Teaching Experience

Teaching Assistant, Ewha Womans University — Mar 2021 - Jun 2021

CS10556 Fourth Industrial Revolution and Creative Convergence
- Instructor: Dr. Jaehee Yang, Dr. Hwanseung Yong
- Tutored basic Python and HTML programming for students.

Skills

Languages
- Korean (*native*)
- English (*proficient*)
  - GRE: Verbal 155, Quant 169, Writing 4.5 (Feb 2021)
  - TOEFL: Reading 28, Listening 30, Speaking 29, Writing 28, Total 115 (Aug 2021)

Techniques Unity, Pytorch, Tensorflow, JAVA, C/C++, Python, HTML, CSS, Javascript, React Native