# Yuki Abe

Ph.D. Student at HCI-lab | Hokkaido University, Japan | Email: hnf\_yuuki@eis.hokudai.ac.jp | Website: https://yukiabe.com/

### **RESEARCH INTERESTS**

Human-Computer Interaction (HCI), Accessibility, Augmented/Virtual Reality (AR/VR), User Experience and Usability (UI/UX)

## **SUMMARY**

Yuki Abe is a Ph.D. student in HCI lab at Hokkaido University. He designs, develops, and evaluates assistive technologies and AR/VR interaction techniques for accessible and inclusive human activities like exercise. He first-authored two ACM CHI papers on AR and VR systems [C.1, C.2], both receiving **Best Paper Honorable Mention Awards (top 5%)**.

#### **EDUCATION**

<b>Hokkaido University</b> Ph.D. Student in Information Science and Technology, advised by Prof. Daisuke Sakamoto	Japan Apr 2024 – Present
Singapore Management University Visiting Ph.D. Student in Computing and Information Systems, advised by Prof. Kotaro Hara	Singapore Sep 2024 – Mar 2025
<b>Hokkaido University</b> Master's degree in Information Science and Technology, advised by Prof. Daisuke Sakamoto	Japan Apr 2022 – Mar 2024

### SELECTED AWARDS

# CHI 2025 Best Paper Honorable Mention [C.1] has been selected as the top 5% of submissions in ACM CHI 2025

**CHI 2025 Best Paper Honorable Mention** 

[C.2] has been selected as the top 5% of submissions in ACM CHI 2025

Apr 2025

Apr 2025

### SELECTED PUBLICATIONS

[J.1] <u>Yuki Abe</u>, Daisuke Sakamoto, and Tetsuo Ono. "I feel lonely when they stop chatting": Exploring Auditory Comment Display for Eyes-Free Social-Viewing Experience in Online Music Videos. *Proc. ACM Hum.-Comput. Interact, CSCW, 2025.* Acceptance rate: TBD. –Explored an auditory interface that enables users without vision to enjoy music videos with other viewers online

[C.1] <u>Yuki Abe</u>, Keisuke Matsushima, Kotaro Hara, Daisuke Sakamoto, and Tetsuo Ono. "I can run at night!": Using Augmented Reality to Support Nighttime Guided Running for Low-vision Runners. *Proc. ACM CHI* '25. Acceptance rate: 25.1%. **Best Paper Honorable Mention Award**.

-Designed, developed, and evaluated RunSight, the first AR assistive technology that enables low-vision runners to run at night

[C.2] <u>Yuki Abe</u>\*, Kan Kusakabe\*, Myungguen Choi\*, Daisuke Sakamoto, and Tetsuo Ono. Understanding Usability of VR Pointing Methods with a Handheld-style HMD for Onsite Exhibitions. *Proc. ACM CHI '25*. Acceptance rate: 25.1%. **Best Paper Honorable Mention Award**.

-Conducted usability study of VR interfaces with handheld headset to provide guidelines for easy-to-start and engaging VR exhibition

## **SKILLS**

- 5+ years of research in HCI and user-centered design. 3 first-authored top-tier peer-reviewed publications like ACM CHI and CSCW
- 5+ years of experience in experimental design of user studies and quantitative and qualitative analysis to interpret results
- 7+ years of experience in programming languages and rapid prototyping with JavaScript/TypeScript, Python, Unity (C#), Swift
- 4+ years developing groupware web service Temaneki from scratch using Typescript, Next.js, GPC, and Figma (2,000+ active users)
- 3+ years implementing signal processing (BLE, UWB), machine learning (PyTorch, transfer learning), and AI Prompt Engineering
- ¥15,000,000 JPY+ (\$100,000 USD+) in scholarship and grants like IPA Mitou and Japan Society for the Promotion of Science (DC2)
- Business fluent in English. Experience in staying in Singapore and leading a research project in English