KAN KUSAKABE

Hokkaido University, Japan
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https://kankusakabe.github.io/Portfolio

TECHNICAL STRENGTHS

Domain: Rapid Prototyping, 3D Print, Mobile Application, Machine-Learning (ML)

Programming Languages: Python, C, C#, JavaScript, PHP, Swift, Objective-C, Kotlin, Java, Arduino, Processing, Dart, LATEX

Frameworks & Libraries: Tensorflow, Pytorch, Next.js, Flutter, React, Unity

Platforms & Development Environments: Android, iOS, Web (Frontend, Backend, Database), Mac, Arduino Platform, Raspberry Pi

Design: Adobe (Illustrator, Photoshop, Premiere Pro, After Effects, Audition, Figma), Fusion 360

RESEARCH TOPIC

Human-Computer Interaction (HCI); Interaction Technique for Mobile Device; Gesture Design; Sensing Technique; Machine Learning (ML); 3D Printing; UI/UX.

FELLOW

1. Hokkaido University EXEX Doctoral Fellowship. 2024–2027. $3,000 annual and stipend.

2. HOKUDAI TECH GARAGE Project. 2 months (March-April 2022), $ 2,000 per project.

EDUCATION

Hokkaido University, Japan *April 2024 —*
Doctor of Computer Science, Advisor: Daisuke Sakamoto

Hokkaido University, Japan *April 2022 – March 2024*
Master of Computer Science, Advisor: Daisuke Sakamoto

Hokkaido University, Japan *April 2020 – March 2022*
Bachelor of Computer Science, Advisor: Daisuke Sakamoto

National Institute of Technology(KOSEN), Gifu College, Japan *April 2015 – March 2020*
Associate Degree of Engineering, Advisor: Deguchi Toshinori

PAPERS

Peer-reviewed International Conferences

- Yuki Abe*, **Kan Kusakabe***, Myungguen Choi*, Daisuke Sakamoto, Tetsuo Ono. *Joint first authors. Understanding Usability of VR Pointing Methods with a Handheld-style HMD for Onsite Exhibitions. ACM CHI Conference on Human Factors in Computing Systems (CHI 2025), ACM, April 2025. **Hornable Mention Award (Acceptance rate 5%)**.

Peer-reviewed Domestic Journals

- **Kan Kusakabe**, Daisuke Sakamoto, Tetsuo Ono. RingSense: Exploring User-defined Gestures for Phone Ring Holders. 情報処理学会論文誌（IPSJ）, 情報処理学会, Vol. 66 (2). February 2025.

Peer-reviewed Domestic Conferences

- **Kan Kusakabe**, Daisuke Sakamoto, Tetsuo Ono. スマートフォン背面のジェスチャ入力を実現するスマホリング型デバイスの設計と実装. 第 30 回インタラクティブシステムとソフトウェアに関するワークショップ（WISS 2022）, 日本ソフトウェア科学会, pp.8-14, December 2022. (Long-press, acceptance rate: 12.5%).

Other Publications (Non-peer-reviewed)

- **Kan Kusakabe***, Yuki Abe*, Daisuke Sakamoto, Tetsuo Ono. *Joint first author. Game-2-X: 種類が異なるゲームプレイ間を繋ぐシステムの提案. 第 31 回インタラクティブシステムとソフトウェアに関するワークショップ（WISS 2023）, 日本ソフトウェア科学会, デモンストレーション発表. December 2023.
- **Kan Kusakabe**, Myungguen Choi, Daisuke Sakamoto, Tetsuo Ono. 無段階調整インタフェースのためのハンドジェスチャによる操作手法の探索的研究. 情報処理学会 研究報告ヒューマンコンピュータインタラクション（HCI）, 2022-HCI-197(25), 1-8, March 2022.