



Name of Researcher, Faculty, Department, Telephone & Email:

Tyler Klein-Longmire, Faculty of Science, Master's Student in Computational Media Design
403-402-2493
tyler.kleinlongmire@ucalgary.ca

Supervisors:

Christian Jacob PhD, Faculty of Science, Computer Science, (403) 220 7682 cjacob@ucalgary.ca
Bruce Barton PhD, Faculty of Arts, School of Creative and Performing Arts, bruce.barton@ucalgary.ca

Title of Project:

XR Aquarium: Mixed Reality Participatory Performance

This consent form, a copy of which has been given to you, is only part of the process of informed consent. If you want more details about something mentioned here, or information not included here, you should feel free to ask. Please take the time to read this carefully and to understand any accompanying information.

The University of Calgary Conjoint Faculties Research Ethics Board has approved this study (REB25-1531).

Participation in this study is completely voluntary. Information collected during the study will be treated as confidential and will be anonymized in all reports, publications, and presentations unless you explicitly choose to be identified.

You may withdraw from the study at any time during the experience without penalty. You may also request withdrawal of your data for up to seven (7) days after your participation. After this period, data will have been anonymized and incorporated into group-level analysis, and withdrawal of data may no longer be possible.

Purpose of the Study

This study explores how people experience shared mixed-reality (XR) technologies—such as augmented reality and computer-based interactions—when used together in a live, participatory public setting, such as a theatre, classroom, or game facility. The goal is to better understand how different roles and abilities assigned to different devices, such as using a headset, a computer console, or a mobile device, affect participants' sense of agency, collaboration, and immersion.

The research will help identify design strategies that can make mixed-reality experiences more engaging, accessible, and meaningful when people share them in the same physical space. This project is part of a graduate thesis at the University of Calgary and contributes to research in interactive media, performance, and emerging technologies.

What Will I Be Asked To Do?

If you choose to take part in this study, you will be invited to participate in a short, interactive mixed-reality (XR) performance session lasting about 30 minutes. You may take on one of several roles, such as wearing an XR

headset, using a computer console, or participating as an audience member using a mobile device. Each role involves simple interactions, light movement, and collaboration with others in the group as you explore a shared virtual environment. You may also opt to simply watch others take on these roles from the audience as an observer, with a view of each player's perspectives shown on displays in the venue.

You will first be given an overview of the experience and safety instructions before beginning. During the session, you may choose to take breaks, switch roles, or stop participating at any time. After the performance, you will be asked to complete a short survey about your experience, which should take less than five minutes.

Some sessions may also include a follow-up focus group discussion lasting approximately 20–30 minutes. In these sessions, participants will be asked open-ended questions about how they felt using the technology, how they interacted with others, and what aspects of the experience were engaging or challenging. Focus groups are entirely optional and their scheduling will be clearly identified when signing up for a timeslot.

The entire experience will be video recorded for research analysis, including focus group discussions. You may opt out of having your image or voice included in any publicly shared materials while still taking part in the study.

What Type of Personal Information Will Be Collected?

If you agree to participate in this study, you will be asked to provide your name, email address, and date of birth (to confirm that you are 18 years of age or older).

The sessions will be video and audio recorded to document participant interactions and focus group discussions. These recordings are used for research analysis to understand how participants interact with the technology and with each other. Only the research team will have access to the full recordings. If you do not wish to be recorded, we ask you to opt out of this study entirely.

If excerpts from the recordings are used for academic presentations, publications, or artistic documentation, any identifying details (such as faces or voices) will be blurred or modified unless you explicitly agree to be identifiable.

There are several options for you to consider if you decide to take part in this research. You can choose all, some, or none of them. Please review each option and indicate your preference:

I grant permission to be video-recorded during sessions and focus groups (including audio): Yes: ___ No: ___

*I agree that **blurred or anonymized excerpts of my recordings** may be used for academic presentations or publications:* Yes: ___ No: ___

*I agree to be **visibly identifiable** (my face or voice may be used) in materials shared publicly, such as research presentations or exhibitions:* Yes: ___ No: ___

You may quote me and use my name: Yes: ___ No: ___

The name you may use to refer to me in public materials is:

Are there Risks or Benefits if I Participate?

There are no significant risks associated with this study. Some participants may experience mild motion discomfort, fatigue, or disorientation while using the XR headset, or mild social self-consciousness while interacting in a group setting. These effects are temporary and comparable to everyday experiences using digital devices or performing in front of others. You may stop or take a break at any time if you feel uncomfortable.

Participation in this study may not provide a direct personal benefit to you, but your involvement will contribute to research on how people engage with mixed-reality technologies in collaborative, creative environments. This knowledge may help improve the design of future educational, artistic, and interactive media experiences.

What Happens to the Information I Provide?

All information you provide will be kept confidential and stored securely. Only the principal investigator (Tyler Klein-Longmire) and the faculty supervisor will have access to the collected data, including recordings, surveys, and transcripts. If research assistants or performers assist with data collection, they will sign confidentiality agreements and will not have access to identifiable data after the sessions.

Your contribution will be treated respectfully and coded with a participant number rather than your name in all transcripts, surveys, and notes. Identifiable information such as your name or contact details will not appear in any published materials unless you have chosen to be publicly identified. Participants who have opted to have their name or likeness included will be acknowledged accordingly in publications or presentations, consistent with their stated consent.

If any photos, audio, or video excerpts are used for research presentations or publications, they will be anonymized (e.g., faces blurred, voices altered) unless you have given explicit permission to be identifiable.

Because this study includes group discussions, complete anonymity among participants cannot be guaranteed, but all participants will be asked to respect each other's confidentiality.

You may withdraw your participation or request the removal of your data up to one week after your session. If you withdraw, all identifiable data you have contributed—such as recordings, surveys, or notes—will be securely deleted and will not be used in analysis. After this one-week period, data will be integrated into the research and anonymized, making it no longer possible to identify or remove individual contributions.

All digital files will be stored on encrypted, password-protected drives in a secure University of Calgary location. Data will be retained for up to five years after the completion of the study and then permanently destroyed.

Signatures

Your signature on this form indicates that 1) you understand to your satisfaction the information provided to you about your participation in this research project, and 2) you agree to participate in the research project.

In no way does this waive your legal rights nor release the investigators, sponsors, or involved institutions from their legal and professional responsibilities. You are free to withdraw from this research project at any time. You should feel free to ask for clarification or new information throughout your participation.

Participant's Name: (please print) _____

Participant's Signature: _____ Date: _____

Researcher's Name: (please print) _____

Researcher's Signature: _____ Date: _____

Questions/Concerns

If you have any further questions or want clarification regarding this research and/or your participation, please contact:

Mr. Tyler Klein-Longmire
Computational Media Design, Faculty of Science
403-402-2493, tyler.kleinlongmire@ucalgary.ca

Supervisor
Dr. Christian Jacob, PhD
Department of Computer Science, Faculty of Science
(403) 220 7682 cjacob@ucalgary.ca

Co-Supervisor
Dr. Bruce Barton, PhD
School of Creative and Performing Arts, Faculty of Arts
bruce.barton@ucalgary.ca

If you have any concerns about the way you've been treated as a participant, please contact the Research Ethics Analyst, Research Services Office, University of Calgary at 403.220.6289 or 403.220.8640; email cfreb@ucalgary.ca. A copy of this consent form has been given to you to keep for your records and reference. The investigator has kept a copy of the consent form.