

HIT Lab NZ  
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## **Social AR Continuum Information Sheet for Study Participants**

My name is Alaeddin Nassani. I am a PhD student at the HIT Lab NZ, and the principle researcher looking at how we can use augmented reality (AR) wearable headsets for sharing social experiences. In the future, many people will have access to AR devices, but it is unknown how these devices can be used for social sharing experiences. An example would be how to see your friends in AR space. How can you interact with your friends or see what they have shared using AR? This study is aiming to explore how friend circles can be represented in AR environments.

If you choose to take part in this study, your involvement will be to take part in a focus group study to discuss different ideas on how to visualize friends in AR space, and give feedback on a few prototype implementations. You will be asked to answer few questionnaires during the study.

The session will be video recorded for post-analysis of the results and to prepare for a publication in a scientific conference. The time of the session is approximately 1 hour.

Participation is voluntary and you have the right to withdraw at any stage without penalty. You may ask for your raw data to be returned to you or destroyed at any point. If you withdraw, I will remove information relating to you. However, once the study is completed, it will be impossible to remove your data.

The results of the project may be published, but you may be assured of the complete confidentiality of data gathered in this investigation: your identity will not be made public without your prior consent. To ensure anonymity and confidentiality, all the data will be stored securely and only the researchers mentioned above will have access to it. However, I might also share parts of the raw anonymized data with other researchers if there is a need to do so. The outcomes of this research will be part of my PhD thesis. A thesis is a public document and will be available through the UC Library, among other places.

Please indicate to the researcher on the consent form if you would like to receive a copy of the summary results of the project.

The project is being carried out as a requirement for doctoral degree by *Alaeddin Nassani* under the supervision of *Robert W. Lindeman, Mark Billingham, Gun Lee, and Tobias Langlotz*. Prof. Lindeman can be contacted at [rob.lindeman@canterbury.ac.nz](mailto:rob.lindeman@canterbury.ac.nz). He will be pleased to discuss any concerns you may have about participation in the project.

This project has been reviewed and approved by the University of Canterbury Human Ethics Committee, and participants should address any complaints to The Chair, Human Ethics Committee, University of Canterbury, Private Bag 4800, Christchurch ([human-ethics@canterbury.ac.nz](mailto:human-ethics@canterbury.ac.nz)).

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## **Social AR Continuum Consent Form for Study Participants**

*To participate in this study, please read and agree to the following statements:*

- ☐ I have been given a full explanation of this project and have had the opportunity to ask questions.
- ☐ I understand what is required of me if I agree to take part in the research.
- ☐ I understand that participation is voluntary and I may withdraw at any time without penalty. Withdrawal of participation will also include the withdrawal of any information I have provided should this remain practically achievable.
- ☐ I understand that any information or opinions I provide will be kept confidential to the researcher *Alaeddin Nassani* and that any published or reported results will not identify the participants. I understand that a thesis is a public document and will be available through the UC Library.
- ☐ I understand that the session will be video recorded for post-analysis.
- ☐ I have been informed of and understand the risks associated with taking part in this research study.
- ☐ I understand that I can contact the researcher *Alaeddin Nassani* or supervisors listed in the information sheet for further information. If I have any complaints, I can contact the Chair of the University of Canterbury Human Ethics Committee, Private Bag 4800, Christchurch ([human-ethics@canterbury.ac.nz](mailto:human-ethics@canterbury.ac.nz))
- ☐ By signing below, I agree to participate in this research project.

Name: \_\_\_\_\_ Signed: \_\_\_\_\_ Date: \_\_\_\_\_

# Pre-Study Questionnaire

1. Age \_\_\_\_\_
2. Gender (Male/Female/Do not wish to declare)
3. How often have you used an Augmented/Virtual Reality (AR/VR) headset?
  - ☐ Daily
  - ☐ Few times a week
  - ☐ Few times a month
  - ☐ Few times a year
  - ☐ Not at all
4. Which AR/VR headset(s) are you familiar with?
  - ☐ N/A
  - ☐ Oculus Rift
  - ☐ HTC Vive
  - ☐ Microsoft Hololens
  - ☐ Other, please specify \_\_\_\_\_
5. How often do you use social networking?
  - ☐ Daily
  - ☐ Few times a week
  - ☐ Few times a month
  - ☐ Few times a year
  - ☐ Once
6. Which social networking sites/apps do you use?
  - ☐ N/A
  - ☐ Facebook
  - ☐ Instagram
  - ☐ Snapchat
  - ☐ Other(s), please specify \_\_\_\_\_

**Exercise 1:**

Describe or draw how you would imagine seeing your social connections using AR in the future

## Exercise 2

In each category below write one of the following: “Stranger”, “Friend”, “Acquaintance” or “Intimate”

3D Avatar



2D Image



Portrait cartoon



Emoji



## Exercise 2 – cont'd

In each category below write one of the following: “Stranger”, “Friend”, “Acquaintance” or “Intimate”

3D Avatar



2D Image



Portrait cartoon

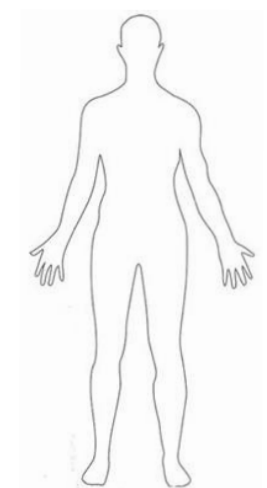
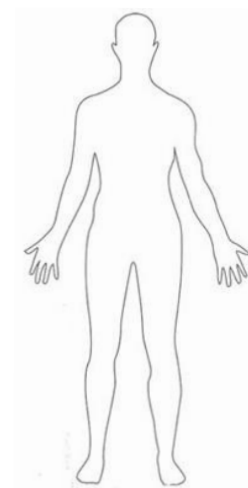
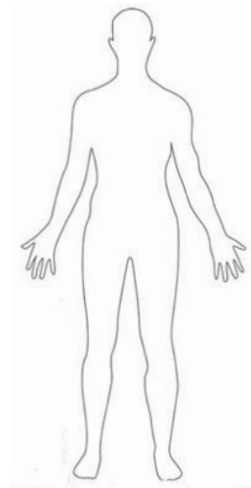
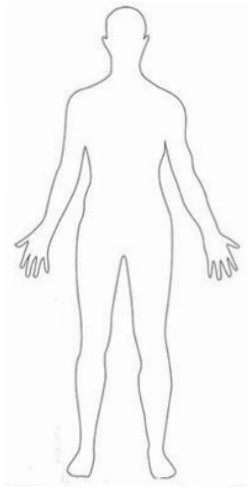


Emoji



**Exercise 3:**

In each box, write one of the followings: "Friend", "Stranger", "Intimate" or "Acquaintance"



Closest

Close

Far

Farthest

Condition-

### System usability questions

	Strongly disagree				Strongly agree
	1	2	3	4	5
I think that I would like to use this system frequently.					
I found the system unnecessarily complex.					
I thought the system was easy to use.					
I think that I would need the support of a technical person to be able to use this system.					
I found the various functions in this system were well integrated.					
I thought there was too much inconsistency in this system.					
I would imagine that most people would learn to use this system very quickly.					
I found the system very cumbersome to use.					
I felt very confident using the system.					
I needed to learn a lot of things before I could get going with this system.					

### Subjective Questions

### How natural was the mapping of proximity to social relationship?

1 2 3 4 5 6 7

Not very natural Very natural

## How natural was the mapping of visual fidelity to social relationship?

1 2 3 4 5 6 7

Not very natural Very natural

How easy was it to distinguish between the different avatars type?

1 2 3 4 5 6 7

Not very easy Very easy



Condition-

### System usability questions

	1	2	3	4	5
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# Post Experiment Questionnaire

What are the **strengths** of each condition?

Base Condition	
Proxemic Filter	
Visual Fidelity Filter	
Combined Filter	

What are the **weaknesses** of each condition?

Base Condition	
Proxemic Filter	
Visual Fidelity Filter	
Combined Filter	

Rank the following conditions from best (1) to worst (4)

Condition	Rank (i.e., 1, 2, 3 or 4)
Base Condition	
Proxemic Filter	
Visual Fidelity Filter	
Combined Filter	

Briefly explain why you chose the best one as the best.

Briefly explain why you chose the worst one as the worst.

Any other comments or suggestions

**Thank you!**