

Participant Information Sheet

UCL Computer Science Research Ethics Committee Approval ID Number: UCL/CSREC/R/16

YOU WILL BE GIVEN A COPY OF THIS INFORMATION SHEET

Title of Study:

Virtual Reality Experiments

Department:

Computer Science

Name and Contact Details of the Researcher(s):

Andrei Bunea, andrei.bunea.22@ucl.ac.uk

Name and Contact Details of the Principal Researcher:

Anthony Steed, a.steed@ucl.ac.uk

1. Invitation Paragraph

You are being invited to take part in a research project. Before you decide it is important for you to understand why the research is being done and what participation will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part. If there is anything that is not clear or if you would like more information please ask the experimenter. Thank you for reading this.

2. What is the project's purpose?

The purpose of the study is to investigate the user experience of current virtual reality systems.

3. Why have I been chosen?

We require that participants are able to see, hear and walk unaided for the duration of the study, that users do not consume alcohol within 6 hours of the start of the experiment and that users are not sensitive to photosensitive epilepsy. Additionally, we require that participants have normal or corrected-to-normal vision, and inform us if they experience any other severe health conditions.

4. Do I have to take part?

It is up to you to decide whether or not to take part. If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form. You can withdraw at any time without giving a reason and without it affecting any benefits that you are entitled to. if you decide to withdraw you will be asked what you wish to happen to the data you have provided up that point.

5. What will happen to me if I take part?

You will be asked to switch off your mobile phones and to complete a pre-experiment questionnaire. You will then use your personal mobile phone to interact with the web application. Afterwards, you will try the VR application using an Oculus Quest VR display provided by the leader of the experiment. You will be paid £0 and the whole experiment should take approximately 20 minutes.



6. Will I be recorded and how will the recorded media be used?

Data such as tracking information from virtual reality equipment may be recorded. Additionally, your spoken responses during the experiment, and answers during the interview may be audio recorded. Any audio recordings will be transcribed and deleted within 14 days. Data recorded during the experiment may be used for analysis, demonstration and further research. All data will be collected and stored in accordance with the UK Data Protection Act 2018 and GDPR.

7. What are the possible disadvantages and risks of taking part?

Users of virtual reality sometimes experience some degree of nausea. If at any time you wish to stop taking part in the study for this or any reason, please tell the researcher who will immediately end the experiment. As a safety precaution, we advise any participant not to operate heavy machinery (including driving) for two hours after the study.

Some users report 'flashbacks' and other side effects of using virtual reality equipment. Research suggests using virtual reality may cause short-term disturbances in vision.

Virtual reality can be a trigger for photosensitive epilepsy. You will be asked to confirm that you do not have photosensitive epilepsy.

8. What are the possible benefits of taking part?

You will be paid £0 for your participation. You will get to experience a novel virtual reality experience. Additionally, it is hoped that this work will improve understanding of how users interact with virtual reality. The ultimate goal is to make virtual reality more successful as a technology.

9. What if something goes wrong?

Should you wish to raise a complaint, please contact principal researcher Anthony Steed using the contact details above. If your complaint is not handled to your satisfaction, you can contact the Chair of the UCL Research Ethics Committee at ethics@ucl.ac.uk.

10. Will my taking part in this project be kept confidential?

All the information that we collect about you during the course of the research will be kept strictly confidential. You will not be able to be identified in any ensuing reports, publications, and other dissemination. Data such as tracking information from display equipment and other sensors may be recorded and stored with a unique participant number. It will not be possible to identify participants through this data. Any audio recordings will be transcribed and deleted within 14 days.

To facilitate removal of your data from the project, should you wish to withdraw, a record matching your name and participant number will be made on a piece of paper separate from all other data collected and kept in a locked cabinet. The record will be destroyed by shredding the relevant paper seven days after the completion of the data collection. Once the record is shredded, the collected experimental data will be completely anonymous.

11. Limits to confidentiality

Please note that assurances on confidentiality will be strictly adhered to unless evidence of wrongdoing or potential harm is uncovered. In such cases the University may be obliged to contact relevant statutory bodies/agencies.

12. Use of Deception



Research designs often require that the full intent of the study not be explained prior to participation. Although we have described the general nature of the tasks that you will be asked to perform, the full intent of the study will not be explained to you until after the completion of the study, at which point you may withdraw your data if you wish.

13. What will happen to the results of the research project?

We aim to publish the results of the research as part of research papers in relevant journals or conferences. Should you wish to obtain a copy of the published results, please contact the researchers using the contact details above. Any published results will be available as open access in the UCL library. You will not be personally identified in any report or publication, and it will not be possible to personally identify participants from any data presented.

Anonymised data may be stored for subsequent research.

14. Data Protection Privacy Notice

Notice:

The data controller for this project will be University College London (UCL). The UCL Data Protection Office provides oversight of UCL activities involving the processing of personal data, and can be contacted at dataprotection@ucl.ac.uk.

Your personal data will be processed for the purposes outlined in this notice.

Further information on how UCL uses participant information can be found in our 'general' privacy notice for participants in research5 studies: https://www.ucl.ac.uk/legal-services/privacy/ucl-general-researchparticipant-privacy-notice.

All of your personal information will be treated under the data protection legislation (GDPR and UK Data Protection Act 2018).

The categories of personal data used will be as follows: Name, age, and gender.

The lawful basis that would be used to process your *personal data* will be performance of a task in the public interest.

Your personal data will be processed so long as it is required for the research project. If we are able to anonymise or pseudonymise the personal data you provide we will undertake this, and will endeavour to minimise the processing of personal data wherever possible.

If you are concerned about how your personal data is being processed, or if you would like to contact us about your rights, please contact UCL in the first instance at data-protection@ucl.ac.uk. If you remain unsatisfied, you may wish to contact the Information Commissioner's Office (ICO). Contact details, and details of data subject rights, are available on the ICO website at: https://ico.org.uk/for-organisations/data-protection-reform/overviewof-the-gdpr/individuals-rights/

15. Who is organising and funding the research?

The research is funded by University College London.

16. Contact for further information

Anthony Steed



Office: 169 Euston Road, room 4.10, NW1 2AE.

Phone: +44 (0)20 3108 7112

Should you wish to take part, you will be given a copy of this information sheet and a signed copy of your consent form to keep. Thank you for reading this information sheet and for considering taking part in this research study.