

Participant Information Sheet

Study: Swarm Escape!

Thank you for taking the time to consider participating in this research project. As a participant, your contribution will be key to advance in our research. That is why we have prepared this information sheet to tell you more about the nature of the project and explain how the data you supply to me will be used and the protections of your privacy and confidentiality that are in place. Please, ask about any part of the study if something is unclear to you.

Who is doing the work?

Daniel Carrillo-Zapata, PhD student based at the Bristol Robotics Laboratory, supervised by Dr. Sabine Hauert, lecturer at the University of Bristol.

What is the study for?

This study is an EPSRC Impact Acceleration Account award aiming to understand people's attitudes towards swarm robotics, where a large number of robots collaborate to perform a task. During this activity, we will ask participants about their current understanding, perceptions and ideas of robot swarms to better adapt this technology to societal needs in the future. To achieve that, we will work together with participants from different societal perspectives to consider benefits and risks of this technology in our future city.

Am I eligible to take part?

If you are aged 16 years or above, you are eligible to take part.

What will happen if I agree to take part?

You will be invited to take part in an escape room, defined by Scott Nicholson as "live-action team-based games where players discover clues, solve puzzles, and accomplish tasks in one or more rooms in order to accomplish a specific goal (usually escaping from the room) in a limited time". You will be part of a group with a minimum of 3 and a maximum of 6 participants. The theme is this escape room is pollution: *A mysterious pollution cloud has arrived to the city. All emergency services are evacuating everyone out. You and your special emergency technological operations unit are the last hope to discover how to combat the pollution.* The door of the escape room will not be locked. Therefore, you will be able to easily abandon the room in case you decide to withdraw from the study at any point, e.g. you become upset or distressed during the experience, or in case of a real emergency.

During the escape room, you will be asked a series of questions. Your answers will not affect the outcome of the escape room or any of the puzzles at all. There is no right or wrong answer. These questions will only inform researchers about your attitudes towards swarm robotics. You are free not to answer them.

After the escape room experience has finished, you will be invited to take part in a debrief with all the participants from your group and a swarm robotics researcher about the benefits and risks of robot swarms in the future. You will

also be able to leave questions for the researchers and provide feedback about your experience in the escape room or the study.

The complete study (escape room plus group discussion) will not last longer than 90 minutes. If you decide to take part in the study, you will be asked to sign a consent form before the start of the escape room to formally confirm that you agree to take part. If you are unable to read and/or sign written forms, you are eligible for a verbal explanation from the researcher and you can confirm your consent verbally in the presence of a third-party witness.

Please, do not participate if you suffer from any condition that could worsen by participating in this thematic activity.

What data will be collected?

The university researcher present at the activity will collect your responses to the questions during the escape room experience, as well as the ideas discussed in the debrief. For all data collected, names and identities will be anonymised. Researchers will analyse the data and produce a research article which may be published in an academic conference or journal. All data collected for research purposes will remain fully anonymised.

The researcher may also take pictures for marketing purposes on social media and on the study website. Anonymised participant quotes might also be collected for marketing purposes.

Finally, there will be a camera inside the escape room for the researcher (the gamemaster) to be able to assist you during the experience and provide hints. This video will only be transmitted live to the researcher, and will not be recorded anywhere or shared with anyone else than the researcher.

How will I be informed about the updates of the study?

All public updates will be made available on the website of the study and social media:

URL: www.swarmescape.org

Twitter: @SwarmEscape

Your rights

Your participation in this research is entirely voluntary. You are free to withdraw from the study at any point up to one week from the date of your participation in the study without giving any reason. In case of withdrawal during this period, any form and questionnaire that you filled in will be destroyed, as well as your data. Please note however that any other contribution (e.g., post-it notes) will not be able to be isolated and destroyed. In case of any, these will be completely anonymous and individual identification will not be possible.

To withdraw from the study, please contact any of the researchers listed at the end of this document.

Protecting your confidentiality

Your data will be stored, analysed and presented anonymously as per university data protection regulations and the EPSRC research data policy:

<https://www.bristol.ac.uk/secretary/data-protection/>

<https://www.epsrc.ac.uk/about/standards/researchdata/>

Specifically, data will be stored on an encrypted, password protected University PC hard drive during the duration of the study. During this period, only the researcher, the Project Supervisor and the event organisers of FUTURES and the Festival of the Future City 2019, shall have access to the raw data collected during the study. Anonymised data collected during the study will be used in academic outputs (e.g. publications and conferences) from the project. On completion of the project or in conjunction with any publications during, all data will be made open access long-term through the University of Bristol Research Data Repository in line with EPSRC data sharing regulations.

If you have any questions about the ethical conduct of this research or are uncertain about any aspect of your participation please contact the University of Bristol Research Governance Team (research-governance@bristol.ac.uk), or any of the people listed below.

Contact details

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