

Department of Computer Science

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Information for Participants

Predicting behaviour of humans playing Trust Game with bots

CUREC Approval Reference: CS_C1A_21_029

General Information

The aim of this study is to investigate the role of trust in economic decisions made in an investment game (also known as the Trust Game) played between humans and artificial bots. Participants will be financially rewarded on completion.

Please note that you may only participate in this survey if you are 18 years of age or over.

We appreciate your interest in participating in this online reward-based experiment. You are able to participate if you are an adult **over the age of 18**. However, placing investments and gaming in general can be addictive and may result in difficulties to stop. Do not participate in this task if you have any concerns about whether this reward-based experiment might adversely affect your behaviour.

Please read through the information below before agreeing to participate, and if you decide you wish to proceed you should tick the boxes on the MTurk task page.

You may ask any questions before deciding to take part by contacting the Principal Researcher, Maciej Olejnik, who is attached to the Department of Computer Science at the University of Oxford. This project is contributing to the outcomes of the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation programme (grant agreement No. 834115) and is being completed under the supervision of Professor Marta Kwiatkowska.

In this experiment, we are conducting research of human decision-making in interactions with robots. We have developed a *bot* that will be your opponent in a simple investment game. 'Player A' is given tokens and is able to invest them with 'Player B' for a return. 'Player B' can decide how much of the proceeds to return to 'Player A'. The experiment will run with both human and bot investors, and human and bot investees with individuals being randomly assigned roles. Players aim to finish the game with as many tokens as possible.

This should take about 10-15 minutes. No background knowledge is required.

No identifiable personal data will be collected. Collected data will include age range, level of

education, gender, past exposure to robots, your responses to the survey and interactions with the bot. All collected data will be used to support research and may contribute to conference papers, journal articles and online resources. Collected data may also be made available in an unrestricted manner (open source), probably via (www.fun2model.org) to aid research more widely.

Do I have to take part?

No. Please note that participation is voluntary. If you do decide to take part, you may withdraw at any point for any reason before finishing the experiment by closing the browser. However, only participants who complete all study activities will be eligible to receive payment.

How will my collected data be used?

The data we will collect that could be used to identify you will be:

- Age Range: (18-24), (25-34), (35-49), (50-64), (65+)+
- Gender: Male, Female, None of the above, Prefer not to say
- Education: High School or lower, Bachelor's Degree, Master's Degree, PhD or higher
- Past exposure to robots: No exposure, limited exposure, fair exposure, high exposure, very high exposure

Your IP address will not be stored. We will take all reasonable measures to ensure that collected data remains unidentifiable.

All collected data, including your responses to the survey and details of your interactions with the bot, will be stored in electronic files on password-protected servers and computers. Collected data will also be made available open source on the project website (www.fun2model.org) and may be used in academic publications, theses, conference presentations, reports for external organisations, websites and videos. Collected data will be stored indefinitely after publication or public release of the work of the research.

By submitting responses and completing the experiment, you agree that your collected data can be transferred, stored or processed. Your collected data may be transferred to, stored and/or processed at a destination outside the UK and the European Economic Area.

Who will have access to my data?

The University will process your collected data for the purpose of the research outlined above. Research is a task that we perform in the public interest. Further information about your rights with respect to your personal data is available from <https://compliance.admin.ox.ac.uk/individual-rights>.

Collected data you provide may be made freely available so we would also like your permission to use the data in future studies, and to share data with other researchers (e.g., in online databases).

The results will be written up as part of a doctoral thesis and may contribute to a publication.

Who has reviewed this study?

This project has been reviewed by, and received ethics clearance through, a subcommittee of the University of Oxford Central University Research Ethics Committee (reference number: **CS_C1A_21_029**).

Who do I contact if I have a concern or I wish to complain?

If you have a concern about any aspect of this study, please contact Principle Researcher, Maciej Olejnik, (maciej.olejnik@seh.ox.ac.uk) or their supervisor, Prof. Marta Kwiatkowska, (qavas@cs.ox.ac.uk), and we will do our best to answer your query. We will acknowledge your concern within 10 working days and give you an indication of how it will be dealt with. If you remain unhappy or wish to make a formal complaint, please contact the Chair of the Research Ethics Committee at the University of Oxford who will seek to resolve the matter as soon as possible:

The Computer Science Departmental Research Ethics Committee, email: ethics@cs.ox.ac.uk Wolfson Building, Parks Road, Oxford OX1 3QD

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