

PARTICIPANT INFORMATION SHEET AND CONSENT FORM

Consent Form Version: 1

Consent Form Date: September, 29, 2022

You are being invited to participate in a research study. Your participation in this study is entirely voluntary. Before you take part in this research study, please read the following consent form.

Please read the information provided here carefully. If you agree with all the terms and conditions stated in this Participant Information Sheet and Consent Form and decided to participate, you may press “Consent & Proceed” button to proceed with the experiment. Otherwise, please press “Abort” to exit this experiment immediately.

If you have any questions on this research study, please email to the experimenter listed in the section below on:

WHO TO CONTACT IF YOU HAVE QUESTIONS REGARDING THE STUDY.

1 STUDY INFORMATION

Protocol Title:

Learning to recognize objects

Principal Investigator’s Contact Details

- a. **Name:** Dr. Mengmi zhang,
- b. **Department:** Visual Intelligence (VI)
- c. **Institution:** Institute for Infocomm Research (I2R)
- d. **Contact email:** mengmi@i2r.a-star.edu.sg

2 PURPOSE OF THE RESEARCH STUDY

The purpose of this study is the human learning ability in object recognition tasks. We hope to learn how humans learn to recognize objects quickly, generalize to new concepts, and capture contextual environments associated with the objects.

You are selected as a possible participant in this study because you are in general good health, aged between 21 and 55 years, and you are able to speak, read and write English, able to type fluently using computer keyboards.

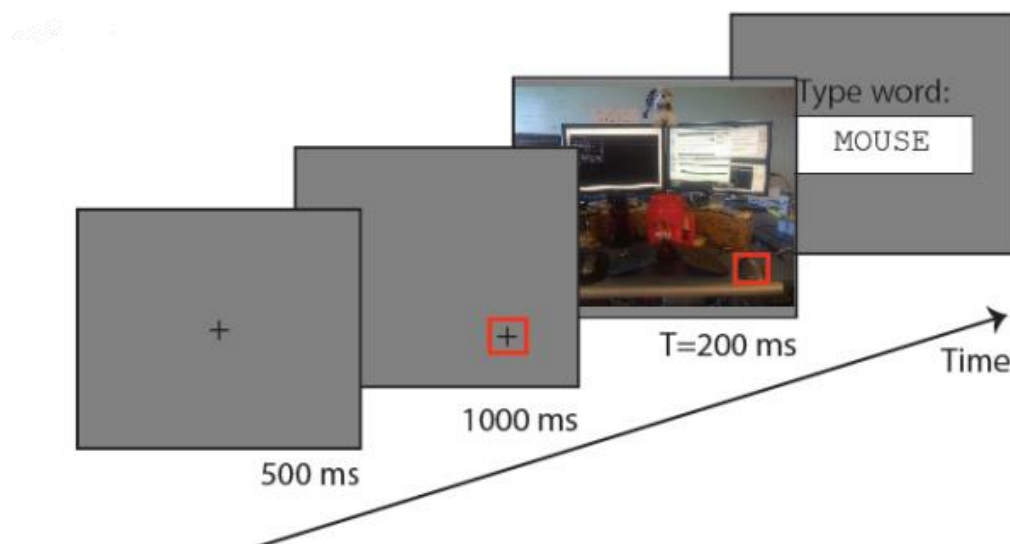
This study targets to recruit 400 online participants on Amazon Mechanical Turk, over a period of **01 November 2022** to **31 March 2025**.

3 STUDY PROCEDURES

If you agree to take part in this study, you will be presented with the following instruction.

The experiment involves a series of image/video shown on computer screens. You have to watch these images/videos and you will be asked to recognize a target object on an image. You will need to type your responses with a computer keyboard. Your text response in the text box will be recorded. Your participation in the study will last *15 minutes*.

You will perform 50 trials, a image will be presented to you in each trial (each trial consists of a presentation of a video consisting of center fixation for 500 milliseconds, image/video presentation for 1 second; followed by a text box asking you to type a word in the box).



The experiment instruction is detailed here:

Use **ONLY** one word to describe what it is in the bounding box on the image. The image is in GIF format (a quick flash of series of image frames).

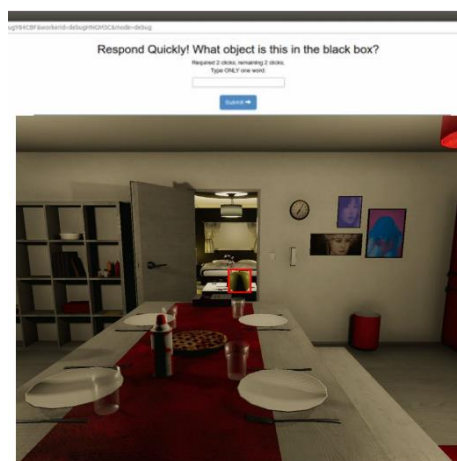
In each GIF image, there are three phases:

Phase 1: You will first see a fixation cross followed by a quick flash of the bounding box with a fixation cross in the center of the bounding box. Pay attention to the bounding box location.

Phase 2: You will see the real image with the region of interest in bounding box. The region of interest has the same location as the bounding box shown in Phase 1.

Phase 3: Try your best to recognize what the object is in the region of interest in the bounding box on the image. Type in your response in the text box. It must be **ONLY ONE** word, a noun. After this, click "SUBMIT" to go to the next image.

There are no video recordings in any way. Only your response in the form of a word corresponding to each image will be recorded. No videos of face or body parts will be saved. The experiment remains anonymous, and we will not be able to reveal or trace back to your identity.



Online session: online Amazon Mechanical Turk (screenshot of the experiment design)

Upon completion of all the assigned tasks, you will be compensated accordingly.

This experiment can only be completed once. If you have already completed the experiment, Amazon Mechanical Turk system will automatically record your encrypted participant ID and will exclude you from participating again.

Once the entire study is completed, all the recorded data will be destroyed. The data will not be used for future research.

Schedule of Visits and Procedures:

Participant can decide when to start the experiment. Participant is not allowed to re-participate the same experiments twice.

4 YOUR RESPONSIBILITIES IN THIS STUDY

If you agree to participate in this study, you should:

- Follow the instructions listed in the instruction webpage.

5 POSSIBLE RISKS, DISCOMFORTS OR INCONVENIENCES

Looking at the computer screen for very long time may make eyes dry and the body in the sitting position may get stiff. We encourage subjects to take breaks if subjects choose to do so.

6 POTENTIAL BENEFITS

There are no direct benefits to subjects from participating in the research study. However, you may benefit from the experiment by knowing the potential of current study on artificial intelligence. Importantly, society will gain from the knowledge obtained through this project.

7 COSTS & PAYMENTS FOR PARTICIPATING IN THIS STUDY

At the end of the experiment session, you will receive the reimbursement amount of 5SGD. This reimbursement process will be automatically handled on Mturk platform. No credit card or other personal financial information is needed.

8 INCIDENTAL FINDINGS

There will not be any incidental findings arising in this research.

9 PARTICIPANT'S RIGHTS

Your participation in this study is entirely voluntary. Your questions will be answered clearly and to your satisfaction.

In the event of any new information becoming available that may be relevant to your willingness to continue in this study, you (or your legally acceptable representative, if relevant) will be informed in a timely manner by the Principal Investigator or his / her representative and further consent may be required.

By signing and participating in the study, you do not waive any of your legal rights to revoke your consent and withdraw from the study at any time.

10 WITHDRAWAL FROM STUDY

Your decision to participate in this research is voluntary and completely up to you. You are free to withdraw your consent and discontinue your participation at any time without prejudice to you. Please close the entire web browser if you decide to stop taking part in this study.

However, the data that have been collected until the time of your withdrawal will be kept and analysed. The reason is to enable a complete and comprehensive evaluation of the study.

The Principal Investigator and/or the Sponsor of this study may stop your participation in the study at any time for one or more of the following reasons: The study is cancelled.

11 RESEARCH RELATED INJURY AND COMPENSATION

The Institute does not make any provisions to compensate study participants for research related injury. However, compensation may be considered on a case-by-case basis for unexpected injuries due to non-negligent causes.

By clicking "Consent & Proceed" button, you agree with the consent and you will not waive any of your legal rights or release the parties involved in this study from liability for negligence.

12 CONFIDENTIALITY OF STUDY AND MEDICAL RECORDS

“Personal Data” means data about you which makes you identifiable (i) from such data or (ii) from that data and other information which an organisation has or likely to have access. Examples of personal data include names, NRIC, medical conditions, medications, investigations and treatment history.

Your participation in this study will involve the collection of Personal Data. Personal Data collected for this study will be kept confidential. Your records, to the extent of the applicable laws and regulations, will not be made publicly available. Only your Investigator(s) will have access to the confidential information being collected.

However, the Sponsoring company *Agency for Science, Technology, and Research (A*STAR)*, Regulatory Agencies, Institutional Review Board and Ministry of Health will be granted direct access to your original medical records to check study procedures and data, without making any of your information public.

Data collected and entered into the Data Collection Form(s) are the property of Institute for Infocomm Research. In the event of any publication regarding this study, your identity will remain confidential.

By signing the Consent Form, you consent to (i) the collection, access to, use and storage of your Personal Data by Institute for Infocomm Research, and (ii) the disclosure of such Personal Data to our authorised service providers and relevant third parties.

Research arising in the future, based on your “Personal Data”, will be subject to review by the relevant institutional review board.

By participating in this research study, you also confirm that you have read, understood and consent to the attached A*STAR Personal Data Protection Policy (Annex A).

13 WHO TO CONTACT IF YOU HAVE QUESTIONS REGARDING THE STUDY

If you have questions about this research study or in the case of any injuries during the course of this study, please contact the Principal Investigator Dr. Mengmi Zhang at mengmi@i2r.a-star.edu.sg.

14 WHO HAS REVIEWED THE STUDY

This study has been reviewed by the A*STAR Institutional Review Board (IRB) for ethics approval.

If you have questions about your rights as a participant, you can contact the A*STAR IRB at hbro@hq.a-star.edu.sg

If you have any feedback about this research study, you may contact the Principal Investigator or the A*STAR IRB.

Annex A

A*STAR's Personal Data Protection Brief

The A*STAR Personal Data Protection Brief sets out how the A*STAR GROUP (including the Research Institutes, centres, networks, consortia, subsidiaries and other units) collect, use or disclose Personal Data in compliance to the PDPA.

- **Consent, Purpose and Notification**
A*STAR GROUP/ENTITY will notify individuals of the purposes for which their Personal Data is collected, used or disclosed by the A*STAR GROUP/ ENTITY and ensure that the individuals' consent have been obtained for such purposes.
- **Access and Correction**
Individuals can make a written request to gain access, correct their Personal Data or withdraw consent to the processing of their Personal Data.
- **Accuracy**
A*STAR GROUP/ENTITY will take reasonable efforts to ensures that Personal Data collected by or on behalf of the A*STAR GROUP/ ENTITY is accurate and complete.
- **Protection**
Reasonable security arrangements will be put in place to protect Personal Data in the A*STAR GROUP's/ENTITY's possession or control from unauthorised access, collection, use, disclosure, copying, modifying, disposal or such similar risks.
- **Retention**
Personal Data will be retained for as long as it is necessary to fulfill the purpose for which it is collected or for business or legal purposes, or in accordance with applicable laws.
- **Transfer Limitation**
A*STAR GROUP/ENTITY will put in place agreements to regulate third party service providers outside Singapore to process Personal Data from A*STAR GROUP/ENTITY for administrative, business and/or legal purposes.

Queries in relation to A*STAR Personal Data Protection practices should be directed to our DPO at dpo@a-star.edu.sg .

CONSENT FORM FOR RESEARCH STUDY

Details of Research Study

Protocol Title:

Learning to recognize objects

Principal Investigator

- a. **Name:** Mengmi Zhang
- b. **Department:** Visual Intelligence (VI)
- c. **Institution:** Institute for Infocomm Research (I2R)
- d. **Contact number:** 88958578
- e. **Contact email:** mengmi@i2r.a-star.edu.sg

Participant's Consent

I agree to participate in the research study as described and, on the terms, set out in the Participant Information Sheet.

The nature, risks and benefits of the study have been explained clearly to me and I fully understand them.

I understand the purpose and procedures of this study. I have been given the Participant Information Sheet and the opportunity to ask questions about this study and am satisfied with the information provided to me.

I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reasons and without my medical care being affected.

By participating in this research study, I confirm that I have read, understood and consent to the A*STAR Personal Data Protection Policy.

By participating, I confirm that I am between age 21 – 55, in general good health, able to speak, read and write English, able to type fluently using computer keyboards.

This is an online experiment. I confirm that I am NOT physically located in Singapore.

By clicking on the “Consent & Proceed” button, I hereby affirm that all the terms and conditions listed in this consent form is true and I hereby give my consent to participate in this study.

