

Title of research study: Time Series Modelling of Human Cognitive States for Human-Robot Interactions

Investigator: Sanjay Joshi

Why am I being invited to take part in a research study?

We invite you to take part in this research study because you are a healthy adult between the ages of 18 and 60.

What should I know about a research study?

- This document will cover:
 - The nature and purpose of the research study.
 - The procedures to be followed.
 - Any common or important discomforts and risks.
 - Any benefits you might expect.
- Whether or not you take part is up to you.
- You can choose without force, fraud, deceit, duress, coercion, or undue influence.
- You can choose not to take part.
- You can agree to take part now and later change your mind.
- Whatever you decide will not be held against you.
- You can ask all the questions you want before you decide.
- You will be able to download a copy of this document for your records.

Who can I talk to?

If you have questions, concerns, or complaints, or think the research has hurt you, talk to the research team by contacting Prof. Sanjay Joshi, phone number (530) 400-5746.

This research has been reviewed and approved by an Institutional Review Board (“IRB”). Information to help you understand research is on-line at <http://www.research.ucdavis.edu/policiescompliance/irb-admin/>. You may talk to a IRB staff member at (916) 703-9151, hs-irbadmin@ucdavis.edu, or 2921 Stockton Blvd, Suite 1400, Room 1429, Sacramento, CA 95817 for any of the following:

- Your questions, concerns, or complaints are not being answered by the research team.
- You cannot reach the research team.
- You want to talk to someone besides the research team.
- You have questions about your rights as a research subject.
- You want to get information or provide input about this research.

Why is this research being done?

The purpose of this study is to investigate how humans learn and adapt. With a better understanding of some of the factors that influence this learning process, we may be able to design training procedures so that people can better control external devices like robots and prosthetic devices.

How long will the research last?

We expect that you will be in this research study for at most 1 hours.

How many people will be studied?

We expect about 200 people will be included in this research study.

What happens if I say yes, I want to be in this research?

If you decide to participate in this research, you will follow a link to run a web-application on your computer. First, you'll be shown a consent form and you will be given time to decide whether or not you want to participate. If so, you will complete intake information for recording basic demographic information (e.g. age, gender, handedness, etc.). If you are a Sona participant, we will also ask for your email address. Your email will only be used to assign you credit up on study completion. Demographic information will be included in reports as part of an aggregate of subject data (e.g. mean age of subjects), or in case studies that do not reveal your identity.

For the rest of the session, you will follow instructions on the screen as prompted. Each trial will consist of videos of a robot performing a task. You must evaluate the robot according to its behavior using on-screen prompts. Following each trial, you will need to report findings and fill out a questionnaire. At the conclusion of the study, you may be asked to fill out an exit survey on your experience.

What happens if I do not want to be in this research?

You may decide not to take part in the research and it will not be held against you.

What happens if I say yes, but I change my mind later?

You can leave the research at any time and it will not be held against you. If you decide to leave the research and were recruited through Sona, you will receive credits only for the number of half hours completed (rounded up). If you decide to leave the research, contact the investigator so that the investigator knows you will not be completing the study (if applicable). Upon withdrawal from the study, your data collected to the point of withdrawal will be deleted and will not be used for any future purpose.

Is there any way being in this study could be bad for me?

All known risks involved in participating in this study are mild in severity and are only somewhat likely

to occur.

- Slight eye strain may occur with continuous focus on a computer screen.
- Slight hand fatigue may occur with continuous use of a mouse/keyboard/trackpad.

Will being in this study help me in any way?

If funds are available, you may be compensated according to your performance completing the task. The Experimenters will provide the conditions for compensation in context of the experiment in training. There are no other benefits to you from your taking part in this research. We cannot promise any benefits to others from your taking part in this research. However, the information we get from this study may help us investigate methods to control systems that range from a cursor on a computer screen to robots to prosthetic limbs.

What happens to the information collected for the research?

Efforts will be made to limit use or disclosure of your personal information, including research study records, to people who have a need to review this information. We cannot promise complete confidentiality. Organizations that may inspect and copy your information include the IRB and other University of California representatives responsible for the management or oversight of this study.

De-identified data from this study may be shared with the research community at large to advance science and health. We will remove or code any personal information that could identify you before files are shared with other researchers to ensure that, by current scientific standards and known methods, no one will be able to identify you from the information we share. Despite these measures, we cannot guarantee anonymity of your personal data.

Can I be removed from the research without my OK?

The person in charge of the research study or the sponsor can remove you from the research study without your approval. Possible reasons for removal include system malfunction. If you are removed from the study by the researcher, you will be credited with the total number of credits originally signed up for (if applicable).

What else do I need to know?

It is important that you promptly tell the person in charge of the research if you believe that you have been injured because of taking part in this study. If you are injured as a result of being in this study, the University of California will provide necessary medical treatment. Depending on the circumstances, the costs of the treatment may be covered by the University or the study sponsor or may be billed to your insurance company just like other medical costs. The University and the study sponsor do not normally provide any other form of compensation for injury. For more information about compensation, you may call the IRB Administration at (916) 703-9151 or email at HS-IRBAdmin@ucdavis.edu.

Permission to Take Part in a Human Research Study

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You will not be compensated for taking part in this study. However, students participating in research studies for course credits (e.g. PSC 1, PSC 41) may receive credits at a rate of 0.5 credits per 0.5 hours of participation. The maximum total number of credits you may receive for completion of the entire study is 6.

By clicking “I Accept,” you acknowledge and understand the information presented above, and agree to take part in this study.