## **Online Consent**

This task is part of a research study conducted by Dr. Cleotilde Gonzalez at Carnegie Mellon University. The purpose of this study is to assess the limitations in current approaches to training humans to detect cyber deception and to determine the best methods for training human participants to detect cyber deception. This project is funded by the Army Research Office through the University of Southern California.

#### **Procedures**

Throughout this experiment, you will make decisions in an individual task categorizing phishing emails. These decisions may involve classifications, choosing between options, or generating ideas. You may or may not receive feedback about your choices. Regardless of the particular situation you are presented with, your decisions will be separated in a number of trials, and you will be informed of the accuracy of your decisions according to the instructions provided. You will receive feedback in the form of points that are accumulated throughout the trials. At the end of the experiment, these will be converted into the total amount you earned. The accumulated number of points represent rewards for making accurate decisions. The study will take under 1 hour to complete.

# **Participant Requirements**

Participation in this study is limited to individuals age 18 and older, currently residing in the United States, with at least basic computer proficiency, and the ability to read and understand English. You must have participated in at least 100 assignments with an approval rating of at least 90%.

## **Risks**

A potential risk during this study is a data breach. To mitigate potential risks, we do not collect any personal identifiers outside of your worker ID. Your ID is only kept to provide payment and will not be included in the data set.

Payment Confidentiality: Payment methods, especially those facilitated by third-party vendors (such as Venmo, Amazon, PayPal), may require that the researchers and/or the vendor collect and use personal information (such as your first and last name, email addresses, phone numbers, banking information) provided by you in order for your payment to be processed. As with any payment transaction, there is the risk of a breach of confidentiality from the third-party vendor. All personal information collected by the researcher will be held as strictly confidential and stored in a password-protected digital file, or in a locked file cabinet, until payments are processed and reconciled. This information will be destroyed at the earliest acceptable time. Personal information held by the third-party vendor will be held according to their terms of use policy.

#### **Benefits**

Participants may derive enjoyment from making decisions and observing outcomes and may derive enjoyment from contributing to the advancement of human knowledge. Your participation will increase scientific knowledge regarding detection of phishing attempts.

# **Compensation & Costs**

You will be compensated \$5 for completing the study activities. In addition, depending on the number of points you earn during the study, you may earn up to \$5 in a bonus payment. You will only be eligible for compensation if you have completed the activity in full and have supplied the appropriate confirmation code. There is no partial payment if you do not complete the study. You will not be penalized if you choose to withdraw from the study without completing it, but you will not be compensated either. You will be paid after study completion.

There will be no cost to you if you participate in this study.

## Confidentiality

The data captured for the research does not include any personally identifiable information about you.

By participating in this research, you understand and agree that Carnegie Mellon may be required to disclose your consent form, data and other personally identifiable information as required by law, regulation, subpoena or court order. Otherwise, your confidentiality will be maintained in the following manner:

Your data and consent form will be kept separate. Your consent form will be stored in a secure location on Carnegie Mellon property and will not be disclosed to third parties. By participating, you understand and agree that the data and information gathered during this study may be used by Carnegie Mellon and published and/or disclosed by Carnegie Mellon to others outside of Carnegie Mellon. However, your contact information and other direct personal identifiers will not be mentioned in any such publication or dissemination of the research data and/or results by Carnegie Mellon. Per regulation all research data will be kept for a minimum of 3 years.

In addition, the sponsor of this study, the Army Research Office (through the University of Southern California), will have access to your research information.

The study will collect your research data through your use of Amazon Metical Turk (mTurk) and Prolific. These companies are not owned by CMU. The companies will have access to the research data that you produce and any identifiable information that you share with them while using their product. Please note that Carnegie Mellon does not control the Terms and Conditions of the companies or how they will use or protect any information that they collect.

## **Right to Ask Questions & Contact Information**

If you have any questions about this study, you should feel free to ask them by contacting the Principal Investigator now at:

# Prof. Cleotilde Gonzalez Social and Decision Sciences Department Pittsburgh, PA 15213 (412) 268-6242 conzalez@andrew.cmu.edu

If you have questions later, desire additional information, or wish to withdraw your participation please contact the Principal Investigator by mail, phone or e-mail in accordance with the contact information listed above.

If you have questions pertaining to your rights as a research participant; or to report concerns to this study, you should contact the Office of Research integrity and Compliance at Carnegie Mellon University. Email: <a href="mailto:irb-review@andrew.cmu.edu">irb-review@andrew.cmu.edu</a>. Phone: 412-268-4721.

## **Voluntary Participation**

Your participation in this research is voluntary. You may refuse or discontinue participation at any time without any loss of benefits to which you are otherwise entitled. You may print a copy of this consent form for your records.

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