

Study on Human Comprehensibility of Attack-Defense Trees

Information about use of personal data (pursuant to art. 13 of the Regulation (EU) 2016/679 - GDPR)

Dear participant we invite you to participate in a study aims to investigate how much the notation of the Attack-Defense Tree is comprehensible by humans, and consequently, easily usable by users belonging to different fields and with different backgrounds.

ADTs are a graphical notation used to model and assess the security of systems, namely a representation of possible measures an attacker might take in order to attack a system and the defenses that a defender can employ to protect the system.

To effectively assess the security of the system, ADTs might serve as one easily understandable human-readable notation. To verify this hypothesis, user studies are necessary.

Therefore, we ask you to fill out some questionnaires structured as follows:

1. A pre-test questionnaire with Your demographic information. The questionnaire will be completed on an online platform accessible via the link that will be provided if You intend to participate in the test.
2. A test with a number of questions/requests about the notation of Attack-Defense Tree administered through an online editable document. The link to the document will be provided if You intend to participate in the test.
3. A post-test questionnaire with a number of questions on Your perception concerning the notation. The questionnaire will be completed on an online platform accessible via the link that will be provided if You intend to participate in the test.

All questionnaires are associated with a unique identification number (ID) in order to make participants not identifiable; the questionnaires require no personal information but may require some personal data of a common nature (e.g. age or gender).

The activity will be conducted by the Institute of Information Science and Technologies "A. Faedo" (ISTI), Italian National Research Council (CNR).

Reference persons belonging to Technical University of Denmark, Kennesaw State University, Sant'Anna School, and the University of Pisa will be enrolled only in the recruitment phase. They will never get hold of the data gathered during the study, including the consent forms that will be collected and archived by the study Principal Investigator.

Therefore, we provide You with the following information:

CONTACT DETAILS

- Data Controller: Italian National Research Council (CNR), (Piazzale Aldo Moro, 7 - 00185 Roma, Italy), through Institute of Information Science and Technologies "A. Faedo" (ISTI), represented by the Director of the Institute, reachable at the following e-mail address: direttore@isti.cnr.it
- Project Manager: Giovanna Broccia, FMT Lab, ISTI-CNR (Via G. Moruzzi, 1 - 56124 Pisa, Italy), reachable at the following e-mail address: giovanna.broccia@isti.cnr.it

PURPOSES AND THE LEGAL BASIS FOR THE PROCESSING

The processing will be carried out only for the purposes of the study, pursuant to art. 6, paragraph 1, lett. a) and lett. e) of the Regulation (EU) 2016/679 and will be based on the principles of

correctness, lawfulness and transparency as well as the protection of confidentiality and Your rights.

VOLUNTARY NATURE OF PARTICIPATION

If you wish to participate in the study, you will be asked to sign a consent form.

Participation in the study is completely free and voluntary. Participation does not entail any benefit and no title of merit.

The consent can be withdrawn at any time and without any negative consequences.

If you wish to withdraw from the research, please contact Giovanna Broccia, ISTI-CNR, Via Moruzzi, 1, 56124, Pisa, Italy. Email: giovanna.broccia@isti.cnr.it

NATURE OF COLLECTED DATA

The data collected in phase 1 (pre-test questionnaires) are personal data of a common nature (for example, age or gender). The data collected in phase 2 (test) concerns the notation test answers. The data collected in phase 3 (post-test questionnaires) concerns Your perception of the notation. The type of questions does not present identification risks and there are no fields with open answers.

METHODS OF DATA PROCESSING

The processing will be carried out by electronic with methods and tools to ensure maximum security and confidentiality, by authorized personnel in compliance with the regulations in force and following the operating instructions provided for by the regulations of the structure. The questionnaire is conducted on the Google Form tool, owned by Google LLC ("Google"), whose privacy policy is available at the following address: <https://policies.google.com/privacy?hl=en-US>, which the user accepts using the tool. Google undertakes to comply with the General Data Protection Regulation (GDPR) of the European Union (<https://business.safety.google/gdpr/>). Furthermore, to avoid the risk of indirect identification, it is necessary to use incognito navigation during navigation.

All data will be downloaded into an ISTI-CNR server handled exclusively by the study Principal Investigator and deleted from the online platform at the completion of each test.

DATA RETENTION

Your personal data subject to processing and other information acquired will be stored and processed for the sole purpose and duration of the project and successive 3 years in compliance with the "Rules of conduct and good conduct for the processing of scientific and statistical data" coherently General Data 14 Protection Regulation (EU) 2016/679 "GDPR" and other relevant national laws and regulations.

COMMUNICATION AND DATA DISSEMINATION

The data will not be disclosed to other subjects. The data will not be disseminated. However, the data will be used for dissemination purposes in aggregate and anonymous form.

TRANSFER OF PERSONAL DATA

Data will not be transferred to non-EU countries.

RIGHT OF ACCESS BY THE DATA SUBJECT

Pursuant to art. 15 of the EU Reg., You have the right to access the data being processed. These include the expected retention period. Where applicable, You also have the rights referred to in Articles 16-21 of the GDPR. 2016/679 (Right of rectification, right to be forgotten, right of limitation of treatment, right to data portability, right of opposition), as well as the right to lodge a complaint with a supervisory authority.

The contact person for exercising the rights of the interested parties, including the right of revocation, is the Director of the Institute ISTI-CNR, reachable at the following e-mail address: direttore@isti.cnr.it

For any information concerning the study the contact is Giovanna Broccia, reachable at the following e-mail address: giovanna.broccia@isti.cnr.it

The Data Protection Officer of CNR can be reached at the following email address: rpd@cnr.it

The present consent form has to be printed, signed, scanned, and sent via e-mail at the following address giovanna.broccia@isti.cnr.it with the subject "Consent Form ADT study".

Consent to the processing of personal data for the implementation of project activities

The undersigned _____ [NAME] _____ [SURNAME]
_____ [DATE OF BIRTH] _____ [ADDRESS]
_____ [E-MAIL]

declares to have read the above information and to consent to the processing of their data necessary for the realization of the purposes envisaged by the study.

SIGN:
