# **Quick IRB - Proposal**

## **Working Title**

Visualization and grouping of dynamic hypergraphs for social network analysis.

### Research team

1 line per research team member

Principal investigator	Jean-Daniel Fekete	Research Director	jean-daniel.fekete@inria.fr
Key contact	Alexis Pister	PhD student	alexis.pister@inria.fr

## **Study Description**

1 paragraph

This study includes in-person experiments in which people will be shown a new dynamic hypergraph visualization system with grouping functions. They will be asked to interact with it, and answer questions on the data, to see if the system is usable and effective, and if it allows to answer sociological questions.

### **Procedure**

1-3 paragraphs

We will recruit between 20 and 30 participants. Participants will be historians, sociologists and computer scientists.

We will ask each participant to answer questions related to a dataset of public scientific publications (VisPubData dataset). This will necessitate interactions with the visualization. We will measure accuracy and time of the answers. A the end, we will ask qualitative feedback to the users about the efficiency of the system to answer the questions..

Experiment data will be anonymized and saved in an Inria machine. The experiment data (without the background and demographics data) will be published in open access on osf.io with a scientific publication. It will be impossible to link the data to a specific person after the anonymization.

#### **Duration**

1 paragraph

Each experiment will lasts between one hour and and hour and a half.

#### Data collection

1 paragraph

We will collect three types of data:

- Experiment data: time and accuracy for the different tasks. Answers to usability questions.
- Background data: answers to simple background questions on experience with social network analysis systems.
- Demographic data: highest obtained degree, age-range, gender (optional), occupation using a rough taxonomy. We collect only these four data fields, in line with the GDPR data minimization principle.

## **Data protection**

3-4 paragraphs

- (1) We will collect all data on an Inria machine.
- (2) We will not collect any identifiable information other than the demographic and background data specified in the "Data collection" section.
- (3) Upon completion of the study, the experimental data (without the demographic information) will be posted on an open-access repository. The data will be public and it will not be possible to edit it. Given the information we collect, there is no possibility to relate

the public data to any particular person.

### Risks and discomforts

1 sentence

This study does not present any foreseeable risks in participating, beyond those experienced in daily life.

### **Benefits**

1 sentence

Participants will not get any financial compensation.

## Voluntary participation

1 paragraph

Subjects will be informed that their participation is voluntary and that they can stop at any time, without providing a reason.

## Right to ask questions

1 paragraph

Participants will be able to contact Jean-Daniel Fekete for any complaints, questions, suggestions, or concerns about this research, or to ask for a publication resulting from the study. They may also contact the Inria COERLE ethics board if they feel the study has harmed them in any way: <a href="http://www.inria.fr/institut/organisation/instances/coerle/composition">http://www.inria.fr/institut/organisation/instances/coerle/composition</a>, and the Inria DPO if they wish to exercise their rights or have any questions about the processing of their data in this system: dpo@inria.fr.

### Consent

1 paragraph

Subjects must be 18 years of age or older, and understand English. They will be given an informed consent form in English and must agree to it to participate in the experiment. The consent form will include contact information for any follow-up questions or concerns.

## **Signatures**

All researchers involved in the project must verify that they agree to the conditions specified in the Quick IRB (Saisine Generique).

We, the undersigned, agree to abide by the terms of the Quick IRB (Saisine Generique) and to inform the COERLE if any issues arise that exceed these terms.

