

User Interfaces adaptation to users and their environment in a natural risks program

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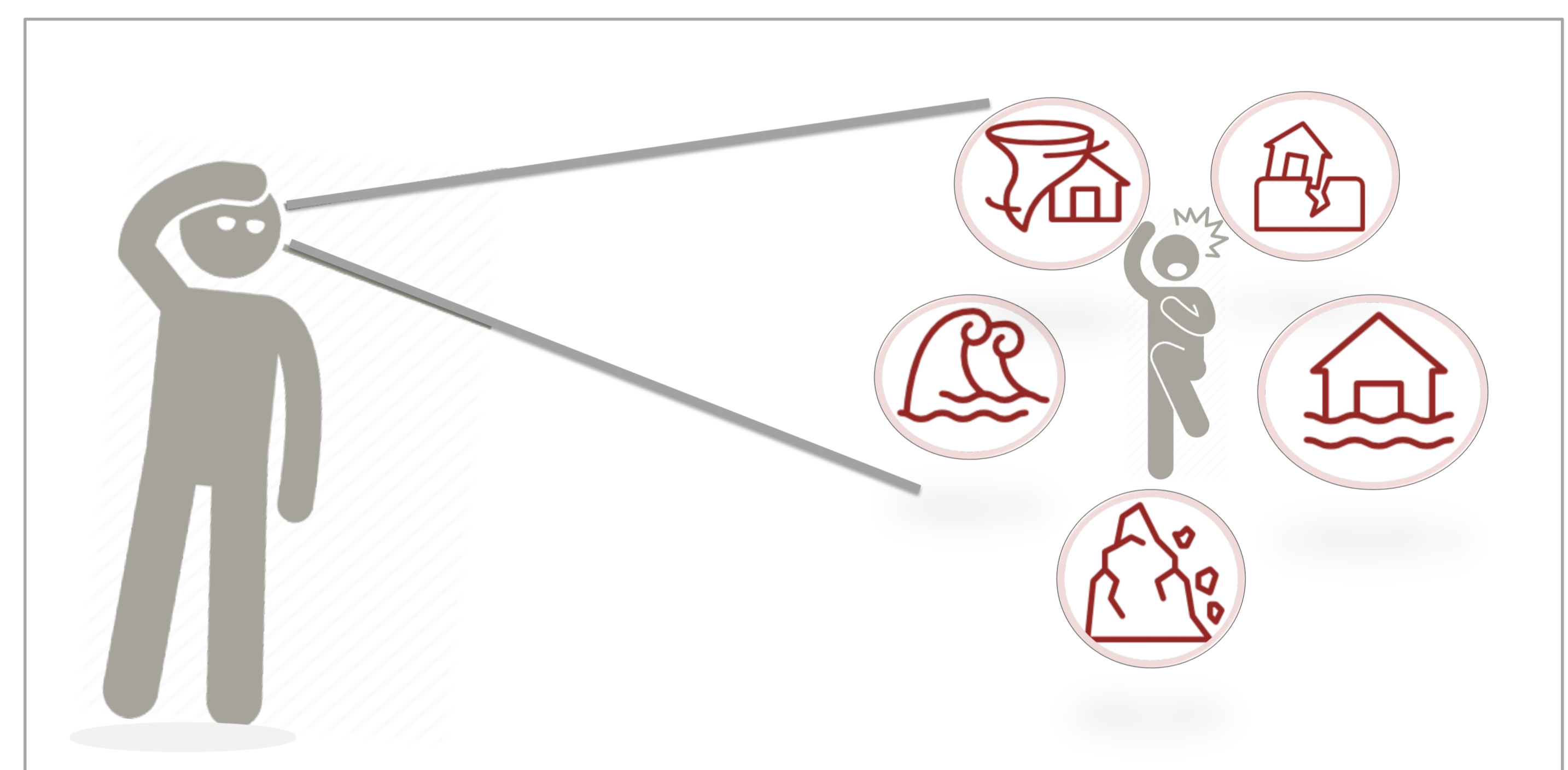


Context - Research Stakes :

The success of the natural risk programs depends on the understanding of the decision-making process of the population to take part in such programs driving to actual actions. Under conditions of uncertainty, the decision-making can be difficult and can result in discrepancies between the theoretical models and the actual behaviors. In this research we are studying the impact of users' emotion on decision making on natural hazards. Considering this impact, we propose to adapt the user interfaces of a serious game for natural hazards prevention.

Objective(s) of the PhD

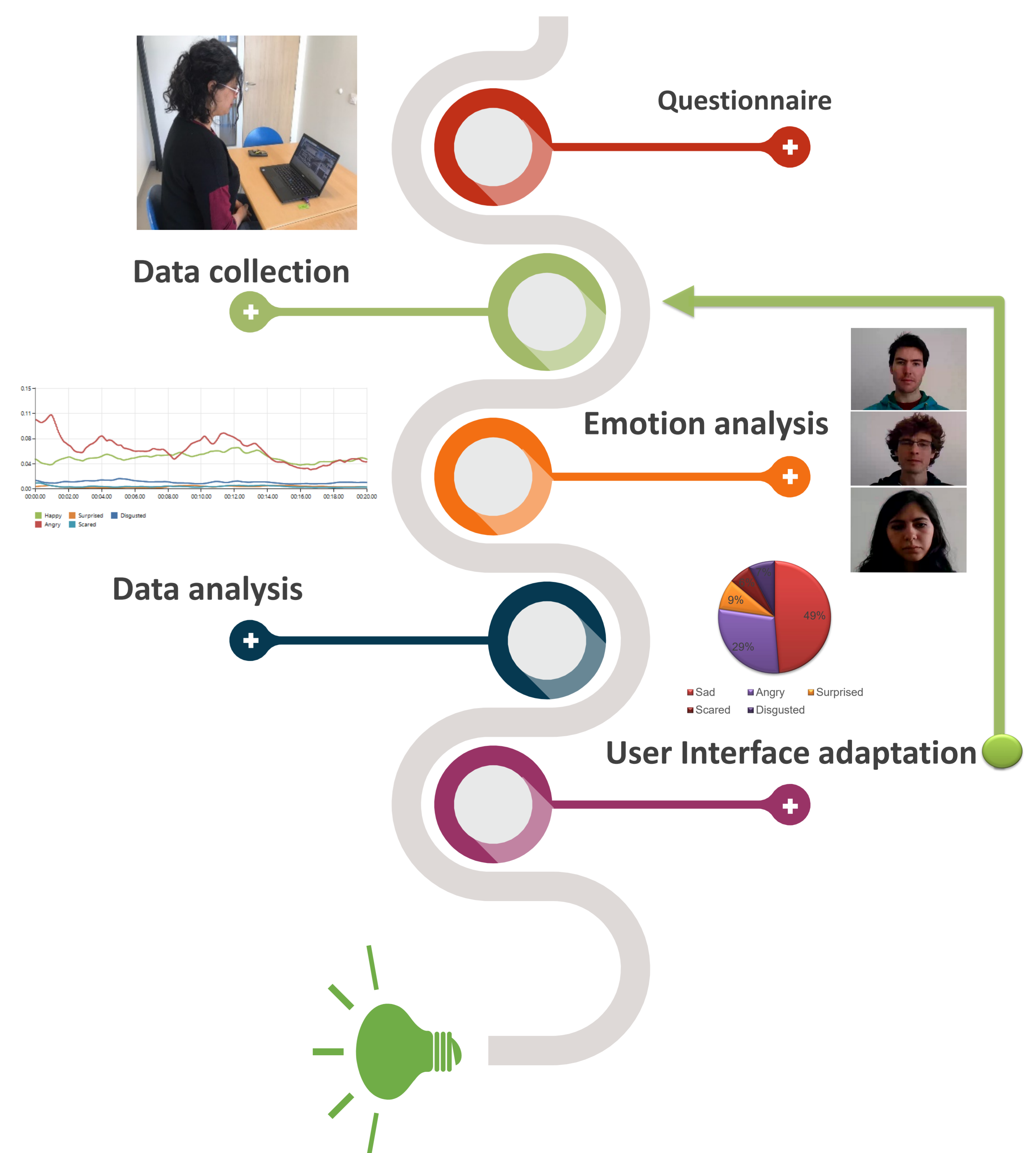
- Modeling individual's decision making process including emotion reactions in the context of natural hazards
- Improve emotion's measurement (captured emotions vs. stated emotion)
- Use the emotion as a measure to propose user interfaces adaptation rules in the context of natural hazards
- Design a prototype for user interfaces adaptation to emotions



Methodology: Experimental and design approach

- Define research problem
- Literature review & hypothesis
- Design of research
- Define research method
- Conduct the test on the hypothesis
- Analyze the data and emotion
- Design the interface
- Implement the interface
- Deploy the interface
- Reflect the interface
- Analysis and conclusion

The relationship between the emotion forecast and real emotion and its impact on behavior.



Expected Results – Applications

- Better understanding the emotions impact on decision making through the lens of affective forecasting theory (forecasted vs. experienced emotions)
- Adapted user interface based on the user model which triggers emotions in individuals by which they make decision

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