

FICHE NAVETTE: DOCTORANTS IDEX

SECTOR: Higher Education Institution

LOCATION: France, Grenoble

RESEARCH FIELD: **RISK MODELLING, ASSESSMENT AND MANAGEMENT, HUMAN-COMPUTER INTERACTION, MARKETING**

RESEARCHER PROFILE:

- *First stage researcher (Master Degree level required)*

INSTITUTION: Univ. Grenoble Alpes, University of Innovation

One of the major research-intensive French universities, Univ. Grenoble Alpes¹ enjoys an international reputation in many scientific fields, as confirmed by international rankings. It benefits from the implementation of major European instruments (ESRF, ILL, EMBL, IRAM, EMFL²). The vibrant ecosystem, grounded on a close interaction between research, education and companies, has earned Grenoble to be ranked as the 5th most innovative city in the world. Surrounded by mountains, the campus benefits from a natural environment and a high quality of life and work environment. With 7000 foreign students and the annual visit of more than 8000 researchers from all over the world, Univ. Grenoble Alpes is an internationally engaged university.

A personalized Welcome Center for international students, PhDs and researchers facilitates your arrival and installation.

In 2016, Univ. Grenoble Alpes was labeled "Initiative of Excellence". This label aims at the emergence of around ten French world class research universities. By joining Univ. Grenoble Alpes, you have the opportunity to conduct world-class research, and to contribute to the social and economic challenges of the 21st century ("sustainable planet and society", "health, well-being and technology", "understanding and supporting innovation: culture, technology, organizations", "Digital technology").

Key figures:

- + 50,000 students including 7,000 international students
- 3,700 PhD students, 45% international
- 5,500 faculty members
- 180 different nationalities
- 1st city in France where it feels good to study and 5th city where it feels good to work
- ISSO: International Students & Scholars Office affiliated to EURAXESS

¹ Univ. Grenoble Alpes

² ESRF (European Synchrotron Radiation Facility), ILL (Institut Laue-Langevin), IRAM (International Institute for Radio Astronomy), EMBL (European Molecular Biology Laboratory), EMFL (European Magnetic Field Laboratory)

MANDATORY REFERENCES:

CDP TITLE: **RISK@Univ. Grenoble Alpes**

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

PRIMARY SCIENTIFIC DEPARTMENT (LABORATORY'S NAME): LIG (Laboratory of Informatics Grenoble)

SECONDARY SCIENTIFIC DEPARTMENT (LABORATORY'S NAME): CERAG (Center for Studies and Applied Research in Management)

PRIMARY DOCTORAL SCHOOL (where the candidate will be registered): EDMSTII

SECONDARY DOCTORAL SCHOOL: EDSG

SUPERVISOR NAME(S): Sophie Dupuy-Chessa (LIG), Eline Jongmans (CERAG)

SUBJECT DESCRIPTION:

To prevent or manage natural hazards, public policy programs are set in. They encompass as main goal the risk management per se as well as the raise of public awareness towards this issue. The success of these 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, for instance when one is facing critical information related to his/her direct environment, the decision-making can be difficult. It can result in discrepancies between the theoretical models and the actual behaviors. The authorities need to understand the decision whether or not to act in agreement with the policy program that has been developed.

The creation of an information chain in an integrated governance of risk management requires the use of new technologies, both to collect information and to consolidate, integrate and disseminate it. In this perspective, many users, with different behaviors, characteristics and skills will have to use these tools.

The thesis studies the impact of the dynamic of an adaptive interface on the user experience applied to the case of the prevention of natural hazards such as landslides, earthquakes or floods. The customization is based on the creation of a user model which then allows to adapt the interface to the user and his/her context of use (environment, interaction device and user's characteristics). The objective is to model these specific personal or contextual characteristics (e.g. sensitivity towards risks, level of information about the issue) and to adapt the interaction in order to spread relevant and valid information as efficiently as possible.

In terms of marketing, the challenge will be to better understand the population willingness to act in agreement with the prevention program. In terms of man-machine interfaces, the aim will be to allow everyone to interact effectively and easily with the tools. These objectives are at the forefront of research in these two areas. Indeed, according to the Marketing Science Institute - the most influential marketing association - the number one research priority is to better understand user experience, including how digital technologies are changing the experience per se as well as the outcome, via modeling proposals. At the same time, man-machine interface research places the use of interfaces and the users' point of view at the heart of its current concerns. In particular, many works seek to adapt the interfaces to the users and their context of use. This marketing/HCI thesis would allow us to identify - through experimentation and modeling - the characteristics of personalization in a specific case study (e.g. landslides or floods in Grenoble area) that improves the user experience to ultimately enable a better prevention of natural hazards.

ELIGIBILITY CRITERIA

Applicants:

- must hold a Master's degree (or be about to earn one) or have a university degree equivalent to a European Master's (5-year duration),

REQUIRED SKILLS

- Theoretical skills: web or mobile development, statistics, marketing
- Methodological skills: User-centered approach, interest for experimentations would be an asset
- Language: A good level in French and English is an asset

APPLICATION PROCEDURE

Applicants will attach a file including:

- Their CV
- A cover letter / letter of motivation
- A summary of previous work done/publications in Master 1 and Master 2
- A record of the grades of Master 1 and Master 2
- A copy of their last diploma

Address to send their application: Sophie.Dupuy-Chessa@univ-grenoble-alpes.fr and eline.jongmans@univ-grenoble-alpes.fr

SELECTION PROCESS

Application deadline: **May 31, 2018** at 17:00 (CET)

Applications will be evaluated through a three-step process:

1. Eligibility check of applications on **June 7, 2018**
2. Selection: the applications will be evaluated by a Review Board in June 2018
3. Results will be given by **July 12, 2018**.

TYPE of CONTRACT: temporary-3 years of doctoral contract

JOB STATUS: Full time

HOURS PER WEEK: 35

CONTRACT STARTING DATE: **October 1, 2018**

APPLICATION DEADLINE: **May 31, 2018**

Salary: 1768.55 € gross per month

Thesis cofunding (if applicable): /