

**The TECFA (Technology for Training and Learning)
of the University of Geneva**

and

**the IT department
of the Geneva University Hospitals**

offer a position as a

PhD student over 3.5 years, on the topic of personalization of interactive narratives

Topic:

As part of a research project funded by the Swiss National Science Foundation, we are starting the development of a digital intervention to help parents living with an adolescent suffering from anorexia to better manage their daily relationship. This intervention consists of an interactive simulation, immersing users in everyday situations, aiming at teaching how to interact appropriately with persons suffering from the disorder.

The uniqueness of our solution is to generate dynamic and personalized learning environments for the acquisition of relational and social skills. We aim to generate dynamically both the events taking place in the "narrative simulation" and the actions available to the user. More specifically, we will seek to finely personalize the initial situation and the course of the simulation according to the context (location, professions, family structure, etc.) and the patient's behavioral characteristics.

During the thesis, the candidate will have to:

- Continue the design and development of a narrative engine, dedicated to the personalization of narrative simulations;
- Participate in modeling the relational dynamics between patient and family member, and the associated pedagogical dimension;
- Integrate the storytelling material into the system, and work on the related authoring tools;
- Participate in the evaluation of the system;
- Publish results and present research in scientific conferences and.

The candidate will work closely with the project team, including four other researchers and another PhD student working on the medical and psychological component.

Desired profile:

- Master degree in the field of Artificial Intelligence, Computer Science, Human-Computer Interface, or a title deemed equivalent
- Knowledge of Artificial Intelligence: rule engines (especially Drools), excellent abstraction skills
- Computer skills: Java programming, client server software architecture, HTTP protocol, relational database. Knowledge of Unity, OAuth, docker and CI/CD is an advantage.
- Knowledge of tools: Git, IntelliJ, knowledge of Jenkins is an advantage
- Knowledge of narrative theory, educational games, graphic design, medical informatics is an advantage
- High level of independence, curiosity, and thoroughness
- Ability to work in an interdisciplinary context
- Writing skills
- Fluency in English, some knowledge in French

Conditions:

47,040 Swiss francs in the first year, 48,540 and 50,040 in the second and third years respectively (gross salary).

Application procedure:

Candidates will send by February 15, 2023, by e-mail, a file including

- A detailed Curriculum Vitae
- A letter of motivation
- References: former colleagues/leaders who can be contacted

Contact address (requests for information, sending of the file): nicolas.szilas[at]unige.ch

The examination of applications starts immediately and will continue until the position is filled.

For further information:

If you wish to know more about our previous research project, based on a similar approach: <http://tecfa.unige.ch/tecfa/research/carezheimer/>