



Postdoctoral Fellowship in Computer Science, TrAI-Soc Chair (MIAI Cluster, LIG) - **Design and evaluation of a serious game to promote food empowerment for students in precarious situations**

- **Duration:** 24 months starting September or October 2026
- **Application Deadline:** June 15, 2026
- **Location:** LIG, IMAG building, 150 place du Torrent, SMH university campus.

Postdoctoral Context – TrAI-Soc Chair

This project is part of the **TrAI-Soc Chair**⁴ (Transformative AI & Social Change), funded by **MIAI Cluster IA**⁵, which explores the transformative effects of AI at individual, collective, and societal levels. In particular, it designs and evaluates AI-based tools to encourage behaviors that are beneficial for health and the environment. By leveraging AI's capacity for personalization and real-time adaptation, we study how technology can effectively support positive, long-term lifestyle changes.

Postdoctoral Objectives

Student precariousness is a growing social issue in France and Europe. A significant portion of students have limited financial resources, which can have direct consequences on their living and studying conditions, as well as their access to quality food. Budgetary constraints, housing costs, and the need to balance studies with employment often reduce the time and means available to maintain a balanced diet.

In this context, food frequently becomes a budget adjustment variable. Some students may be forced to reduce the quality or diversity of their meals, skip meals, or turn to low-cost but less nutritious products. This situation can also generate a sense of loss of control over one's food choices, reinforcing inequalities in health and well-being.

Furthermore, students often express interest in more responsible consumption practices (local and organic products, waste reduction, sustainable food choices). However, this interest may face several obstacles: financial constraints, a lack of practical information, difficulty accessing certain food options, or a lack of time. There is thus a gap between favorable

⁴ <https://miai-cluster.univ-grenoble-alpes.fr/fr/recherche/chaires/trai-soc-transformative-ai-social-change-1626829.kjsp>

⁵ <https://miai-cluster.univ-grenoble-alpes.fr/miai-institute/>

attitudes toward responsible consumption and actual practices, which are often constrained by precariousness.

In this context, developing tools to strengthen students' capacity for action, improve their knowledge, and offer solutions adapted to their constraints appears essential. The use of a serious game constitutes an interesting approach to raise awareness, inform, and encourage food practices that are simultaneously accessible, balanced, and more responsible. The objective of this game is to restore **food empowerment** for students in precarious situations.

The postdoctoral fellowship follows an internship (April–July 2026) that will have already conducted: a systematic literature review on the determinants and levers (notably digital) of consumption among students in precarious situations; the development of evidence-based recommendations for the game's design; and the drafting of pre- and post-intervention questionnaires. The concept of the game is presented in this article: Adam, Carole, Julie Dugdale, and Agnès Helme-Guizon. "Un jeu sérieux pour assister les choix alimentaires des étudiants précaires." *Jeux et Enjeux*. Dijon, juin 2026. <https://hal.science/view/index/docid/5594811>

Missions of the Postdoctoral Fellow

- **Design the game** and its gameplay principles (*game design*)
- **Design the BDI agent model** (*Beliefs, Desires, Intentions*) learned by the AI
- **Develop the game** (mobile phone application)
- **Evaluate the game** using the questionnaires developed by the intern
- **Write scientific publications**

Required Skills:

- **PhD in Computer Science**, preferably related to serious games and/or agent-based modeling and simulation.
- **Excellent programming skills.**
- An interest in **social sciences and multidisciplinary research.**
- Proven ability to **communicate in French and English.**
- Proven ability to **write research articles in French and English**, and to communicate research results orally (conferences, seminars).

Dates and Conditions of the Postdoctoral Fellowship

The 24-month postdoctoral fellowship, starting in September or October 2026, will be based in Grenoble at the **LIG**. A shared office will be provided. The fellowship will be supervised by **Carole Adam** and **Julie Dugdale**, Professors in Computer Science at the LIG within the **SocSim-K** team⁶, in close collaboration with **Agnès Helme-Guizon (CERAG)**.

Remuneration: Based on UGA salary scales, depending on experience.

⁶ <https://lig-socsim-k.imag.fr/>

Application Procedure

To apply, please send the following documents:

- **Detailed CV**
- **Thesis defense report** (*Rapport de soutenance*)
- **A summary of your thesis**, highlighting the skills relevant to this project
- **A cover letter** explaining your interest in this project and the contribution you believe you can make
- **A link to your GitHub repository** (if applicable) or to other software you have already developed or significantly contributed to
- **Recommendation letter or academic references** (optional)

You should send these documents in a **single archive** by email, with the subject line "**Postdoc MIAI TrAI-SOC**", to:

- Carole Adam : carole.adam@imag.fr
- Julie Dugdale : julie.dugdale@imag.fr
- Agnès Helme-Guizon : agnès.helme-guizon@univ-grenoble-alpes.fr

Following a pre-selection process, you may be invited for an interview.

Please note that the selected candidate must undergo a **security clearance (referral to the FSD - Defense Security Officer)** to be recruited at the LIG. In the event of a negative decision, the recruitment process cannot be completed.