

Offers

Ph.D. and M.Sc internship offers in Applied Artificial Intelligence (AAI) for Sustainability

University of Québec à Chicoutimi (UQAC) with Synchromedia Lab at École de Technologies Supérieure (ÉTS) is carrying out research in Applied data science and AI in sustainability transition. Students who are already enrolled in a master or a PhD in their universities can benefit from these internships, given a co-supervision agreement setup. This is a call for applications under interuniversity partnership.

For more additional details, please see the description below and the application procedure.

For further information contact: darine.ameyed.1@ens.etsmtl.ca and /or

[Olivier Riffon@uqac.ca](mailto:Olivier_Riffon@uqac.ca)

Description of Proposed Research

Project title: SYNERGIE

Assignable – A master student or Ph.D. candidate in Computer Sciences or Software Engineering and Information Technologies

Time-related – 6 months. (with a possible extension)

Research Context

Synergies program is to start and lead an innovative collaboration, combining human and technological skills, to optimize the mobilization of collective intelligence and facilitate collective choices to accelerate the sustainability transition.

Data science, information technology, big data, and advanced analytics have the potential to enable sustainability transition, using data-driven methodology by improving the way data is collected, combined, analysed, and shared. To enable the ecosystem stakeholders to make the transition, it is relevant to invest in systemic methods, tools considering all the data of the territory, and allowing to generate and extract fluid, adaptable and relevant knowledge.

The aims of this project are to design and develop human-oriented technologies to help generate active loops of machine-assisted interpretation and learning, producing and capturing information about actions across the local ecosystem to offers knowledge-based decision-making tools to help shape the sustainable development strategy planning of the territory reflecting the community point of view.

Skills and Profile

We are looking for peoples with:

- A strong background in Machine Learning, with focus on NLP and ensemble learning;
- Experience in programming using Python and R;

- Knowledge on SQL/NoSQL, MongoDB, NumPy, Panda, Scikit_learn, Keras
- Github and Docker knowledge is a big plus ;
- Knowledge in math foundations, logic, data structure, algorithms, and computer science in general;
- Flexibility and ability to work with experts from a broad range of scientific and technology backgrounds;
- A dynamic personality, motivation, curiosity and the ability to overcome new challenges.

Application procedure

The application must be in French or English and include a curriculum vitae, motivation letter and degree certificates. Interested candidates should send these documents by email to Prof Olivier RIFFON and Dr. Darine AMEYED: Olivier_Riffon@uqac.ca & darine.ameyed.1@ens.etsmtl.ca.

After evaluation of their application, selected candidates are invited for an interview.