As part of the further development of the USNB solution, the research engineer will specifically

Assignment

References:
https://gitlab.inria.fr/usnb/universal-social-network-bus

A first version of the SocialBus software is available under the AGPL open source license at https://gitlab.inria.fr/usnb/universal-social-network-bus.

The candidate should have interest and/or be willing to develop expertise in online social networking and participatory systems.

The candidate should be both autonomous and a team-worker.

Conditions for application

Defence Security:
This position is likely to be situated in a restricted area (ZRR), as defined in Decree No. 2011-1425 relating to the protection of national scientific and technical potential (PPST). Authorisation to enter an area is granted by the director of the unit, following a favourable Ministerial decision, as defined in the decree of 3 July 2012 relating to the PPST. Unfavourable Ministerial decision in respect of a position situated in a ZRR would result in the cancellation of the appointment.

Recruitment Policy:
As part of its diversity policy, all Inria positions are accessible to people with disabilities.

Warning: you must enter your e-mail address in order to save your application to Inria. Applications must be submitted online on the Inria website. Processing of applications sent from other channels is not guaranteed.
contribute to:

- Design and implementation of an automated solution to the synthesis of software mediators associated with the plugging of given social interaction services, while the current SocialBus implementation relies on the ad hoc, cumbersome and error-prone implementation of the required mediators by the developers.
- Customizing SocialBus to foster the participation of citizens in urban consultation processes. The work will subdivide into:
  - The study of workflows associated with participatory processes,
  - The elicitation of supporting middleware-relevant mechanisms,
  - The design and implementation of such mechanisms for the integration within SocialBus.

The work will go along with the adoption of adequate software engineering practices, and the production of documentation.

**Main activities**

The activities to be undertaken derive from the above expected contributions and include:

- Analyzing and getting to know the existing SocialBus prototype implementation.
- Designing and implementing a solution to the automated synthesis of mediators for the connection of online social network services to the bus.
- Customizing SocialBus for large-scale participatory processes.
- Experimenting with, and assessing, SocialBus in the context of participatory processes.
- Ensuring the quality of the developed software.
- Producing the documentation associated with the developed software.

**Skills**

Expertise, including experience or at least knowledge in the following topics:

- Service-oriented architectures,
- Middleware architectures and systems,
- Implementation on Java EE and/or Node.js,
- Implementation of Web APIs,
- Code generation,
- Use of database management systems,
- Use of social networks.

**Benefits package**

- Restauration subventionnée
- Transports publics remboursés partiellement