Collaborative Data-centric Workflows: Integrating Uncertain Data and Knowledge Base (M/F)

**About the research centre or Inria department**

The Inria Lille - Nord Europe Research Centre was founded in 2008 and employs a staff of 360, including 300 scientists working in sixteen research teams. Recognised for its outstanding contribution the socio-economic development of the Nord - Pas-de-Calais Region, the Inria Lille - Nord Europe Research Centre undertakes research in the field of computer science in collaboration with a range of academic, institutional and industrial partners.

The strategy of the Centre is to develop an internationally renowned centre of excellence with a significant impact on the City of Lille and its surrounding area. It works to achieve this by pursuing a range of ambitious research projects in such fields of computer science as the intelligence of data and adaptive software systems. Building on the synergies between research and industry, Inria is a major contributor to skills and technology transfer in the field of computer science.

**Context**

The goal of this PhD is to study the workflows involving crowds for discovering information in the context of uncertain data.

This PhD will be in collaboration with Serge Abiteboul in Valda Team in Paris.

The student will also present his work in conference.

In both cases, travel expenses will be covered.

**Assignment**

Assignments:

Under the supervision of Lionel Seinturier and Pierre Bourhis, the candidate will do a PhD in 3 years.

For a better knowledge of the proposed research subject:

A state of the art, bibliography and scientific references are available at the following URL,

http://cristal.univ-lille.fr/~bourhis/these-headwork.pdf

Collaboration:

The recruited person will be in connection with Serge Abiteboul of the INRIA Team Valda and in the ANR projet Headwork.

**Main activities**

Main activities:

The candidate will establish a state of the art;

Find questions to lead his project;

Develop Theory and Algorithms;

Experiments the algorithms;

Write reports and present his works in conferences.

**Skills**

**General Information**

- **Theme/Domain:** Data and Knowledge Representation and Processing
- **Software engineering (BAP E)**
- **Town/city:** Villeneuve d’Ascq
- **Inria Center:** CRI Lille - Nord Europe
- **Starting date:** 2018-10-01
- **Duration of contract:** 3 years
- **Deadline to apply:** 2018-05-02

**Contacts**

- **Inria Team:** SPIRALS
- **Recruiter:** Bourhis Pierre / pierre.bourhis@inria.fr

**The keys to success**

A taste for the scientific curiosity and the tenacity for solving problems are important qualities to succeed in a PhD.

**Conditions for application**

Candidates will be treated firstly with a complete file: CV + letter of motivation + one or more letters of recommendation + transcripts from previous years.

**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. An 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.
Skills:
The candidate should have good notions in database theory but also in database management programming and in algorithmic. Classical notions of theoretical computer science as complexity should be known by the candidate. Basic notions over artificial intelligence will be appreciated.

Required qualities:
Sense of organization, autonomy, rigor
Write notes/reports
Good knowledge of English

Benefits package
Benefits
- Subsidised catering service
- Partially-reimbursed public transport
- Social security
- Paid leave
- Flexible working hours
- Sports facilities

More information about Lille:
http://www.lille3000.eu/portail/
http://www.lillemetropole.fr/mel.html

Remuneration
Remunerating
The gross monthly salary is 1982€ for the 1st and 2nd year, 2085€ for 3rd year.