

## Postdoctoral Researcher

### « Transportation system design for autonomous mobility services »

The University of Valenciennes solicits applications for a one-year postdoctoral position starting in December 2017 or January 2018.

#### Research Project

This postdoctoral position is proposed as a part of an ambitious research project that aims at developing innovative transportation services through a fleet of autonomous electric shuttle vehicles dedicated to the “First and Last Mile” issue, both for people and for goods. The candidate will focus mainly on the proposal of a general framework for the design, planning, and decision-making for an autonomous vehicle fleet deployment as a demand-responsive system, at the strategic, tactical and operational levels. The framework must reflect the characteristics and address the requirements of the main components of the transportation system. This involves identifying and describing their demand and supply physical, informational and decisional components and interactions. We are seeking to hire a postdoctoral researcher to work on heuristic and exact approaches for vehicle routing problems. Examples of related applications are electric vehicle routing problems or vehicle routing problems with hours of service regulations. The project is funded by the Region « Hauts-de-France ».

#### Requirements

- Ph.D. in Operations Research, Computer Science, or related fields
- Research expertise in applying mathematical programming methods to combinatorial optimization problems
- Good programming skills (preferably C/C++)
- Ability to work both independently and within a team
- Good verbal and written communication abilities (English)

Desired:

- Research experience both in modeling and solving routing problems and in applying heuristic and exact solution methods

#### The LIA ROI-TML

The postdoctoral position is proposed in the frame of the International Associate Laboratory (LIA CNRS) “Operational Research and Computer Science in Transport, Mobility and Logistics” (ROI-TML) between the Laboratory of Industrial and Human Automation Control and Mechanical Engineering and Computer Science (LAMIH UMR CNRS 8201) of the University of Valenciennes and the CIRRELT (Interuniversity Research Centre on Enterprise Networks, Logistics and Transportation), Canada. The candidate will work 6 months within the CIRRELT in Montreal (Canada) and 6 months in Valenciennes (France).

#### Salary and Conditions

This postdoctoral position is available for one-year and will start in December 2017 or January 2018. The successful candidate will receive an attractive salary based on the French salary system for public universities (which for this position is around 47 000 EUR gross per year).

#### Closing Date for Applications

Review of applications starts immediately and the position will remain open until a successful candidate is found.

#### Application

We are looking forward to your application, all applications or inquiries should be sent by email to



Prof. Rabie Ben Atitallah ([rabie.benatitallah@univ-valenciennes.fr](mailto:rabie.benatitallah@univ-valenciennes.fr)). Your application should include a cover letter describing your experience and research interests related to this position, a detailed CV including a publication list, and contact details of references.