

Call for a PhD Position: **"The vehicle as source and consumer of information: Distributed and selective data gathering, storage and dissemination in vehicular networks"**

This is a call for a PhD position available within ISAT (Institut Supérieur Automobile et Transport), www.isat.fr, University of Bourgogne, Nevers, France.

Research context and objectives:

Vehicles have become more sophisticated, with vast amount of processing, memory and communication capabilities with no power limitations. They are aware of not only their operational state but also their surroundings through sensor, radars and GPS capabilities. This development has emerged new paradigm known as vehicular sensor networks (VSN) and new applications and services that rely on information obtained from the vehicle itself and its environment. In VSN, different kind of sensing devices available on-board and also off-board gather information about the driver's environment (speed, acceleration, temperature, road condition, electrical car battery level, tire swelling, etc.). Such collected information present an opportunity to service providers/municipalities in order to offer a set of new vehicle urban sensing applications that could be proposed to the drivers/passengers through a dissemination algorithm. However gathering, storing, and disseminating such huge information are challenging aspects. An efficient use of the wireless communication medium (4G LTE and V2X communications) for urban sensing vehicular applications will be the major objective of this PhD thesis.

The PhD position is about proposing, designing and evaluating new solutions/protocols for **selective data gathering, storing and dissemination** for VSNs. The evaluation of such solutions will be carried out using simulations and a small-scale testbed.

Profile:

Master degree in Computer Science preferably in the area of network/distributed systems or an equivalent degree giving access to PhD studies.

Interest in mobile networks, network simulation tools, and good programming skills are an advantage. Very good written and oral English skills requested.

Financing: Contract for 3 years.

PhD Location: The PhD will take place at ISAT, Nevers, France.

Start: October-November 2011

How to Apply and contact:

Applicants should send a letter of motivation and detailed curriculum vitae in electronic forms to:

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