

Opening for a PhD student position at [Universitat Politècnica de València](#) within the PLASMA project (“Service Platform for Smart Cities with Dense M2M Networks”) funded by the Spanish government.

- **Duration:** 4 years.
- **Application period:** September, 10<sup>th</sup> – 24<sup>th</sup>, 2014.
- **Starting date** (estimate): March 2015.
- **Gross annual salary** (approx.): 16400 euros

### Qualifications

Candidates are expected to hold a university degree (MSc or equivalent) in telecommunications, electronic engineering, computer science, mathematics or a similar discipline. They are required to register for the PhD program at our department for the 2014-15 course.

We seek candidates that either (1) have a strong background in performance modeling and quantitative methods and an interest in networking and telecommunications, or (2) have a strong background in networking and telecommunications and an interest in performance modeling and quantitative methods. They will be collaborating with the research group within the PLASMA project.

### Application

The PhD position is associated to the above project, so that the research group will select among the candidates. However, the application process is carried out in the context of a wider national call conducted by the Spanish Ministry of Economy and Competitiveness, which fixes the deadlines and the administrative requirements. Interested applicants are advised to contact us and prepare the necessary information and documents asap.

### Contact

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### More info:

- **Call:** <http://bit.ly/1waoVTh>
- **FAQ** (from last year’s call): <http://bit.ly/1uGVwfn>
- **Universitat Politècnica de València:** <http://www.upv.es>
- **Research group:** <http://www.girba.upv.es/english.htm>
- **PhD in Telecommunications:** <http://bit.ly/Yt35MU>

- PROJECT SHORT DESCRIPTION

### **PLASMA (“Service Platform for Smart Cities with Dense M2M Networks”)**

The PLASMA project will address the technological challenges that appear when a large number of devices such as sensors and actuators are interconnected, in order to develop data capture platforms and to transfer open link data, in the context of the Internet of Things (IoT) in Smart Cities. Our aim is that our research will have the maximum possible impact in the solution of the problem. Thus, we look for a solution based on a theoretical research activity component together with a practical innovative activity component based in the development of a platform with real users.

This platform will allow us, on the one hand, to characterize the potential research challenges in such a way that we will assure that these ones will correspond to real necessities at the same time that the results of the project are optimized; and in the other hand, this approach will allow us to test some of the technological and algorithmical solutions proposed in the project.

More specifically, in the project, we will address the design and optimization of mechanisms and protocols that will allow us to solve the technological challenges that appear when it is necessary to transfer large amounts of data with a high density of users, taking into account the following facts:

- The information transfer in an environment with a large amount of devices has to be as efficient as possible and in the case of using cellular technologies, has to impact as low as possible with other applications.
- The analysis of economic models that will allow the development of feasible value-added services based on massive sensing data.
- The search for solutions that minimize the access network impact and the communication protocols when the data captured is multimedia.