1. Interested institution:

Universitat Politècnica de Catalunya – BarcelonaTech
Carrer Jordi Girona, 31, 08034 Barcelona

2. Brief Description of the Institution

The Universitat Politècnica de Catalunya (UPC) is a public university that specializes in the fields of architecture, engineering, merchant seamanship, economics, health sciences and applied mathematics. The UPC is very active in post-graduate education, with an offer of 62 of Masters Adapted to the European Higher Education System (including 13 Erasmus Mundus master’s programs funded by the European Commission), and 25 doctoral programs with “Mention of Quality”, a distinction of excellence awarded by the Spanish Ministry of Education and Science. These educational programs have traditionally attracted Spanish and Latin American students, although more recently, the increased visibility of Erasmus Mundus programs and an active policy of the University have secured a steady flow of excellent students from Europe and Asia.

In order to develop its international policy, UPC-BARCELONATECH has joined a number of networks of universities of excellence, each of which has different objectives and dedicates its efforts in the joint work of prestige institutions to obtaining results that position us, provide visibility and lead the interests and strategies of the institution at the highest level.

UPC continues its commitment to economic development and strengthening its continuing education programs through the UPC Foundation. UPC’s Technology Transfer Centre (TTC) is a substantial R&D contributor to Catalonia’s industrial sector. UPC is currently working in over 250 research areas, and we have a growing number of specific research centres and regional technology centres focusing on current research needs.

Regarding the transfer of knowledge domain, it is to highlight that the main goals of the Technology Transfer Center:

• Fostering innovation and technological progress in industry by transferring results and technology.
• Enhancing the participation and performance of UPC researchers in technological research and development projects

The centre is responsible for the management and the administration of the research projects participated or lead by UPC researchers, along with those projects in which the UPC is acting as host institution, such as Marie Curie Actions.
3. Please tick the areas of research (as established in Marie Skłodowska Curie Actions)

☐ Chemistry (CHE) ☐ Environmental Sciences and Geology (ENV)
☐ Social Sciences and Humanities (SOC) ☐ Life Sciences (LIF)
☐ Economic Sciences (ECO) ☐ Mathematics (MAT)
☒ Information Science and Engineering (ENG) ☐ Physics (PHY)

4. Research / Project Description

The candidate is expected to join the control group of the Institut de Robòtica i Informàtica Industrial (IRI), which is a Joint Research Unit (JRU) composed by members from the UPC and the Spanish National Council for Scientific Research (CSIC). The control research group has been involved in an intense research activity, in basic and applied fields in the last ten years, namely: optimal control of flow networks, fault diagnosis and fault tolerant control and advanced control design and application to complex systems related to the key fields of water and energy.

Therefore, the candidate will perform her/his research in topics related to advanced control of large-scale complex systems such as flow networks (e.g., drinking water, gas, sewage) or electrochemical systems for production of Green energy (e.g., fuel cells, etanol reformers, micro Smart grids). The research will require the direct contact with companies and SME related to the described systems. Moreover, the candidate will be encouraged to organise/participate in international research outreach events that show the advances and proposed approaches towards the scientific community and industry.

5. Who can apply?

At the deadline for the submission of proposals (10/09/2015), researchers (*):

• shall be in possession of a doctoral degree or have at least four years of full-time equivalent research experience.
• must not have resided or carried out their main activities in the country of Spain for more than 12 months in the 3 years immediately prior to the abovementioned deadline.

6. Contact person

Carlos Ocampo-Martinez
Assistant Professor ESAII – UPC
Deputy Director Institut de Robòtica i Informàtica Industrial
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+34 93 401 5752
7. Applications: documents to be submitted and deadlines

- Detailed CV
- Motivation Letter
- Two scientific references

Please note that:

- Deadline of the next call for proposals for Marie Sklodowska – Curie Individual Fellowships is September, 10th 2015.
- Oficina Europea is only responsible for the display of the expressions of interests received by the institutions; further contact and information requests will take place directly between the host institutions and the interested researchers.

(*) Further details on the Call and additional eligibility criteria can be found at the Participants’ Portal.