



INTERESTING TOPICS OF FP7-ICT-2013 FOR CITIC- Research Centre of ICT

CITIC is a research center on ICT of the University of A Coruña (Spain). CITIC is a meeting point between the university and the company that combines R&D departments of companies in the ICT sector with researchers from the university. Currently, more than 250 researchers are working in different R&D projects.

The areas through which is developed the R & D activity of the CITIC are:

- *Wireless Communications Systems*
- *Artificial Intelligence and Applications*
- *Advanced Visualization*
- *Application integration / Information integration*
- *Systems Usability and Testing Methods*
- *Distributed Systems and Service Oriented Architecture (SOA)*
- *Digital Home and Networked Media*
- *Geographic Information System (GIS)*
- *Digital Image Processing*
- *Web Information Systems (WIS)*
- *Information Retrieval*
- *Mathematics: Statistics and Operation Research. Applied mathematics*
- *High Performance Computing (HPC)*

CITIC is interested in participating in the 10th Call FP7-ICT-2013 that ends in January 2013. Here are the topics that interest us and our capabilities in them:

Topic 1.2 Software Engineering, Services and Cloud Computing. Be interesting the following objectives:

- a) Advanced computing architectures and software engineering for the cloud and beyond, to the area of supercomputing, the group led by GAC
- b) Innovative tools for software and services, for the area of distributed systems and service-oriented architectures (SOA), led by the group MADS

Topic 1.3 Digital Enterprise. The objectives would be interesting a) New models for the Digital Enterprise, for the Search and retrieval information area and the Web Information Systems area.

Topic 1.6 - Connected and social media. Interesting for our area of Digital Home and Media Network, led by MADS group with extensive experience in national and international projects on Digital Television

Topic 2.1 - Robotic, Cognitive Systems and Smart spaces, paragraph b) cognitive systems for the field of artificial intelligence with LIDIA groups and RNASA.

Topic 3.4 - Advanced Computing, and embedded control systems. Be interesting the following objectives:

- a) Data management, server hardware and software of the future (interesting to Databases groups LBD and supercomputing GAC).
- b) High Performance Computing (very interesting for Supercomputing area led by the group GAC)

Topic 4.1 - Analysis of digital content and language technologies. Be interesting the following objectives:

- a) Convert information into useful knowledge (for the area of Information Retrieval led by IrLAB group and for the area of Web Information Systems led by LBD group)
- b) multimodal communication (for the area of application integration and business information led by TELEMATICA group)

Topic 5.1 - Custom Health, active aging and independent living. The objectives of this topic to highlight:

- a) It allows the user to control / manage their health



- b) Monitoring system autotune patient health
- c) Provide greater autonomy for the elderly

Interesting especially for Artificial Intelligence group LIDIA leading projects as monitoring and antenatal diagnosis (CAFE), monitoring and diagnosis of sleep apnea syndrome (MIA-SOFT) and Custom Sports Advice (PROSAICO).

Topic 5.2 - Virtual Physiological Human. The objective that would interest us is a) Modeling and simulation of human organs for line VARPA projects developed in the type retinaria Image analysis (SIRIU) and automatic detection of the macular area (SEDAM). And also in line RNASA group who have done work on fibrohistiocitarios gives skin tumors and soft tissue modeling somatic cell system for generating artificial forms and information processing.

Topic 5.3 - ICT for smart and personalized inclusion. We would be interested in order a) Augmented reality, ambient intelligence (for RNASA group that has made a project of integration of ICT in groups of people with disabilities: Intic)

Topic 5.4 - Policies and Governance, We would interest objectives:

- a) E-government, improve public services through ICT, in which some groups in the area of Geographic Information Systems (GIS) and have previous experience, such as LBD groups and GAC.
- b) electronic identification systems (as in the area of digital image processing, the group develops a project VARPA biometric authentication based on the tree retinal and other project about the Analysis human behavior: Research focused on the analysis of human behavior in video sequences with multiple individuals).

And finally, in the Challenge 6 - ICT for a low carbon economy, we are interested in the **topic 6.5 Cooperative Mobility.** We found interesting the objectives:

- a) Automatic driving, where within the area of Artificial Intelligence LIDIA group has previously worked in another FP7 projects related to this subject (Low Carbon at Work: Modelling Agents and Organizations to achieve transition to a Low carbon Europe (LOCAW))
- b) Improving human-machine interaction in data mining, this goal could be involved in several different technological areas of CITIC:
 - Artificial Intelligence Area (with LIDIA group and RNASA group)
 - Supercomputing Area (with GAC Group)
 - Applied Mathematics and Statistics Area (with MODES group and M2NICA group)
 - Geographic Information Systems Area (with LBD group and GAC group).

The remaining topics are also interesting but they are generic and do not ask so many technicalities ICT, but surely we can make on them tasks and collaborate on the development of some work packages.

Please, for more information see the Center website: <http://citic-research.org/>

Or take a look at the dossier of capabilities:

In English: <https://www.box.net/s/60dbe5f905c2e72a5d10>

In Spanish: <https://www.box.net/s/75ef439acb0d63548f99>

Carmen Iglesias Escudero

Project Office Manager and Quality

Email: proyectos.idi@citic-research.org

Tel +34 981 167 000 Ext. 5503 Fax +34 981 167 092 5502 Int

CITIC Bldg Campus Elviña s / n 15192 A Coruña <http://citic-research.org>