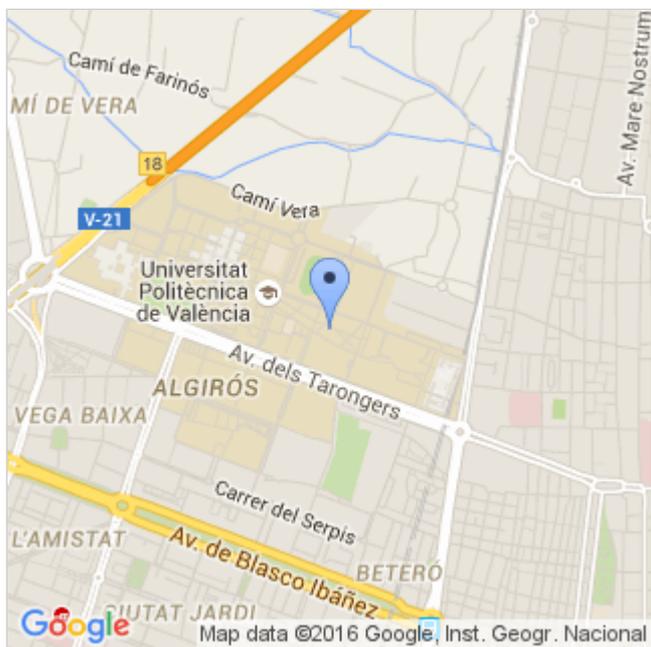


Expression of Interest



Contact Person/Scientist in Charge

- **Name and surname:** Vicente Botti Navarro
- **Email:** vbotti@dsic.upv.es

Universitat Politècnica de València (UPV)

Department / Institute / Centre

- **Name:** GTI-IA, Departamento de Sistemas Informáticos y Computación (DSIC) - Universitat Politècnica de València
- **Address:** Campus de Vera; Camino de Vera, s/n; Valencia (46022)
- **Province:** Valencia

Research Area

- Information Science and Engineering (ENG)
- Environmental Sciences and Geology (ENV)

Brief description of the institution:

Universitat Politècnica de València (UPV) is the single Spanish Technical University that features in the main University world rankings. It is within the top 5 Spanish Universities with the highest revenue from both public research and knowledge transfer activities, and a national leader in patent license income and start up creation. Constituted in 1971, it comprises nearly 30.000 students, over 2500 academics, and 17 university research centres of excellence.

UPV has a relevant experience in the participation in international research programmes, with over 100 FP7 projects and 40 H2020 projects in the period 2014-2015. UPV researchers are also actively involved all H2020 life program stages, from workprogramme drafting discussions, to project coordination. It is also taking part in several major partnering initiatives (JTI, PPPs, KICs...).

Brief description of the Centre/Research Group (including URL if applicable):

The Artificial Intelligence and Information Technology Group (GTI-IA: <http://www.gti-ia.upv.es/>) of the Universitat Politècnica de València (UPV) research areas include agreement technologies, multi-agent systems, complex networks and big data analysis, intelligent manufacturing systems, simulation, recommender and decision support systems, persuasion technologies, affective agents, and affective-based agreement technologies. The group was a Spanish node of the European network of Agreement Technologies COST. It was also member of the following excellence networks: Agentcities.ES, [Agentcities.NET](#), Agent Link I, II and Agent Link Agent Link III. GTI-IA has led/participated in successful national and international research projects (65) and in projects with industry or business partners (11). In their context,

GTI-IA has been responsible of the development of 7 large applications that include technologies that have been transferred to industrial companies and technology-based firms. Its members actively collaborate with the academic community in the management and organization of international conferences and workshops (ECAI 2004, AAMAS 2104), and have a large number of scientific publications in conferences and high impact journals.

GTI-IA leads the micro-cluster [Social and Economic Computing](#), which brings more than 80 full time researchers from artificial intelligence, neuroeconomic and neuroscience areas.

Members of GTI-IA have supervised 30 Ph.Ds. on different Artificial Intelligence, Multi-agent Systems and Agreement Technologies topics.

Project description:

Persuasion Technologies and their application to recommendation and decision-support systems - Intelligent System for integrated and sustainable management of urban fleets (SURF)

One of the main research areas of GTI-IA is Persuasion Technologies and their application to recommendation and decision-support systems. Concretely, the researcher will work under the framework of the Intelligent System for integrated and sustainable management of urban fleets (SURF) project.

The SURF project tries to integrate sustainable models of route planning and resource allocation with a persuasive recommendation system, where persuasive arguments should be specific and critical to achieve a change in the ecological awareness of system users.

Current recommendation systems tend to base their recommendations on quantitative measures on the similarity between user preferences and items to recommend, between the user profile and the profile of other users with similar preferences or combinations of both. However, a good recommendation is one that is really able to persuade the user and make him/her happier. The study of the persuasive power of recommendation systems is an emerging area of research. In this area, the use of explanations or

arguments is a powerful tool of persuasion that may increase the persuasive potential of recommender systems. In the specific domain of urban mobility, the critical issues to take into account are those related to the sustainability of the system, to the user preferences and to the specific objectives of the users' travel destinations. In this domain a recommendation system may persuade people to use more environmentally friendly transportation.

Applications

CV, 1 letter of motivation, 2 recommendation letters