Expression of Interest

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Contact Person/Scientist in Charge

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Universitat Politècnica de València (UPV)

Department / Institute / Centre

- **Name:** Pattern Recognition and Human Language Technology (PRHLT) Research Center - Universitat Politècnica de València
- **Address:** Campus de Vera; Camino de Vera, s/n; Valencia (46022)
- **Province:** Valencia

Research Area

- Information Science and Engineering (ENG)

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 (JTIs, PPPs, KICs…).

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

The Pattern Recognition and Human Language Technology (PRHLT) research center (https://www.prhlt.upv.es) is composed by researchers from the Universitat Politècnica de València. Members of the PRHLT perform research both in fundamental (pattern recognition, multimodal interaction, machine learning) and applied (machine translation, handwritten text recognition, natural language processing, speech processing, information and image retrieval) areas. Currently, the PRHLT has 25 members (9 academic members, 3 postdoctoral researchers, 15 predoctoral researchers, and a technology transfer manager). The PRHLT has been involved in several projects with public and private budgets, in particular with EC through ESPRIT, FP5, FP7, H2020 and NoE, with the Spanish government through CICYT projects and with technology transfer projects. PRHLT has coordinated a Spanish CONSOLIDER-Ingenio project which involved more than one hundred researchers. PRHLT is also involved in the SOCOCODE project with US Army Research Office on social copying community detection.

Members of the PRHLT have published 100+ papers in international scientific journals, 450+ papers in top tier conferences and 250+ papers in books, workshops, and Spanish journals; 60+ are the PhD theses that have been defended. The PRHLT has developed different prototypes and products for text and speech translation, computer-assisted translation, speech recognition, both fully automatic and interactive handwritten text image recognition and image retrieval, as well as plagiarism detection and cross-script information retrieval.

Project description:

Development of online learning and interactive-predictive techniques for machine translation and their application in two specific problems: agil localisation and crosslanguage plagiarism detection

The researcher is to be integrated in the Machine Translation group (https://www.prhlt.upv.es/page/areas/translation) and he should contribute in the development of online learning and interactive-predictive techniques for machine translation and in the application in two specific problems: agil localisation and cross-language plagiarism detection. The goal of this project is to develop an innovative computer-assisted framework based on novel interactive-predictive approaches that will allow for the construction of systems that produce high-quality translation by placing a human operator at the center of the production process. The human serves as the guarantor of high-quality; the role of the automated systems is to ensure increased productivity. This project also offers a particularly propitious context in which to test new adaptive learning techniques. In the first application, agil localisation, the candidate should tackle the problem by considering several additional information sources which are not typically present in a standard machine translation scenario, and make use of interactive-predictive technologies for solving specific problems of localization. On the other hand, the machine translation systems underlying the localisation automation will be required to both adapt to the specific context of the task being tackled and to incorporate additional translations dynamically.

In the second application, the candidate should produce a cross-language version of a plagiarism detection system based on machine translation tools.

Applications

- CV

- Letter of motivation

- 2 reference letters

- Deadline: July 15, 2016