CALL FOR EXPRESSION OF INTEREST

3 Postdoc Positions at Málaga University (Spain) in the Software Technologies and Software Engineering Institute (ITIS Software) to be incorporated between January and June 2021

37,500€ - 60,000€ (annual gross salary) depending on the experience of the selected candidate

Application deadline: 2 April 2021

Duration: 30-36 months

Stage 1: Applications will be evaluated monthly in the reception order

Stage 2: Selected candidates from Stage 1 will be interviewed

Context:

The University of Málaga (UMA, Universidad de Málaga) is a public university established in 1972. With more than 36,000 students and 2,300 lecturers/teachers, the UMA offers 62 degree courses, 22 doctoral programmes, more than 60 master's Degrees, as well as more than 80 internal degrees and 100 courses throughout the academic year. Education takes place in 26 centres by appointed teachers in 81 departments. The great majority of the teaching is organised within two campuses.

In the UMA, 262 research groups are actively involved in national and international research projects and public-private collaborative contracts. In the last few years, the number of agreements and contracts with businesses and organisations has varied between 450 and 500 and, over 60 patents on average have been filed, among which 30 were also protected internationally. Moreover, UMA has participated in more than 200 international research projects, with 45 of them belonging to the FP7, and 64 to Horizon 2020 (5 projects have been coordinated by UMA). In addition, UMA is active Full Member of the Big Data Value Association (BDVA - http://www.bdva.eu/), with José Francisco Aldana Montes as the contact person.

ITIS Software is a university research institute created by the Andalusian Regional Government. The mission of the ITIS is to contribute to the development and application of software technologies and information technologies in general through research, innovation, training and technology transfer. The ubiquity of software and the transversality of its applications make the Institute an interdisciplinary space in which specialists in different technological areas and application domains work together to advance these technologies. More than 40 PhDs are currently working in the Institute, which in the last ten years has obtained public and private funding of more than 30 million euros in competitive calls at European and national level.

Within the ITIS Software institute, data management, integration and analysis (including Big Data) are the main research topics of the Khaos Research Group (University of Málaga, Spain). Khaos main background is related to semantics technologies. Nowadays, our group is developing three research topics in line with technologies than can be applied to them in combination with semantics:

- Data Management (Relational Databases, NoSQL Databases, Linked Data)
- Metaheuristics (Optimization Algorithms, Operational Research)
- Data Analysis (Big Data Analytics, Machine Learning, Deep Learning, Data Mining, Text Mining, Information Retrieval)

These research topics are being also applied to Big Data (large amounts of data, data streams, heterogeneous data). In this context, we are applying the results of this research to combine management, integration and analysis of Big Data to Agricultural ICT Solutions and Health Applications.

KHAOS research members lead the Master Degree in Data Analytics on Big Data of the University of Málaga and actively participate in the Master Degree on Digital Transformation of the Agroalimentary and Forestal sectors (Transformación Digital en el Sector Agroalimentario y Forestal, DIGITAL-AGRI) of the Universidad de Córdoba.

KHAOS Research is growing due to the leading and participation in several LifeWatch ERIC projects. It aims at attracting talented postdocs to work in these projects, but also to co-lead novel research lines, improve their CV and apply for coming positions at the University Department ("Lenguajes y Ciencias de la Computación").

Requirements for the position include a PhD in Computer Science (best before 2016) with a strong first-author publication record. Excellent communication skills, both verbal and written, are a must. A desire to mentor and teach graduate and undergraduate students in the lab is also a plus. Beyond qualifications and skills, the successful applicant should be collaborative, resourceful, and productive and must be able to manage multiple research and industrial projects with ease and have an eye for common approaches and themes. The postdoc positions opened are related to these research areas:

1.   Semantic Technologies, Text Mining, Linked Data, Knowledge Graphs. This research line has been developed in the group for more than 20 years, and it is still active in its application to brink context to Big Data Analytics. Nowadays, it is also under exploitation in industrial projects with international companies located in the Andalusian technological park (placed in Málaga).
2.   Big Data technologies, Parallelism, Metaheuristics. This research line has been developed for more than 20 years, and it is currently focused on the development of mechanisms to automate selection and configuration of algorithms. It is also being applied in industrial projects taking into account our experience in using these techniques in real scenarios, including the selection of the best parallelism approach depending on the case.
3.   Machine Learning, Deep Learning, Data Analytics. This line is focused on applied research in several domains, but especially in AgriFood and Biomedicine. Thus, we are developing research and industrial projects on the analysis of remote sensors from satellite images (from Sentinel) and personal sensors from patients.

Duties:

●   Participation in international and national research projects and on writing technical reports and scientific publications.
●   Management of the development team in industrial projects.
●   Preparation of proposals for European projects in relevant thematic areas.
●   Supervision of PhD students.

Qualified candidates should submit:

●   a cover letter describing your qualifications,
●   Curriculum Vitae detailing your research experience (D1, Q1, Q2 and high quality conference publications, project management, PhD supervision),
●   names and contact information for three references who can provide letters upon request,

For sending the submission or asking for more information about this position,

contact us at khaospositions@uma.es