PhD Contracts for outstanding candidates to undertake research in trustworthy and reliable Artificial Intelligence at Univ. Rey Juan Carlos, Madrid

The Research Centre for Artificial Intelligence and Information Technology (CETINIA) at University Rey Juan Carlos (URJC) offers six predoctoral research contracts in the context of a large Spanish national project on “Value-Awareness Engineering” (VAE). The project will be carried out in cooperation with the Artificial Intelligence Research Institute (IIIA) of the Spanish National Research Council (CSIC), and the Valencian Research Institute on Artificial Intelligence (VRAIN) at Technical University of Valencia (UPV).

The general aim of the VAE project is to develop tools and technologies for building value-aware systems. Here, value-aware refers to systems that understand our human values and ensure their behaviour to be aligned with those values. The project is centred in the context of trustworthy Artificial Intelligence and will build upon and advance works in the field of multiagent systems, especially related to normative systems, agreement technologies, machine learning, logic programming, individual and collective decision making and explanation mechanisms, as well as ethical foundations of agency.

Successful candidates will work closely with senior CETINIA researchers and other research associates in the project on modelling and implementation tasks, preparing research articles for publication in peer-reviewed journals, and presenting findings at conferences and workshops. Desired outcomes of the research contracts are PhD dissertations, possibly related to one or several of the aforementioned topics of the VAE project. Some positions include the opportunity of implementing cotutelle agreements with collaborating European Universities.

**Requirements**

Candidates are required to hold a degree in Computer Science or related fields (Telecommunication Engineering, Applied Mathematics, Industrial Engineering, etc.), have good communication skills in English and/or Spanish, and be able to demonstrate strong motivation to conduct research. Having completed (or finishing) a Master’s Degree, preferably on Artificial Intelligence, Data Science, or similar topics, is a plus. Good programming skills (Python, Java, and/or Matlab) as well as a solid background in Artificial Intelligence (see the VAE topics above) are desirable. Qualified women are particularly encouraged to apply.

**Benefits of the contract**

The annual salary is 24,000 EUR before taxes and includes Spanish Social Security. In addition, generous allowances are given to support presentation of work at international conferences and to attend seminars and tutorials. The expected duration of contracts is three years. Contracts are conditional on satisfactory progress, which is reviewed every year.

**Start date**

The desirable start date is February 2023 although variations may be possible depending on the candidates’ circumstances.

**Application**

To apply for these contracts, you are kindly asked to send your (i) motivation letter describing your research interests and goals, (ii) CV, (iii) transcripts, (iv) certificates, (v) contacts for two references, and (vi) relevant publications (if any) in one PDF file to the following e-mail: vae.contracts.urjc@gmail.com preferably by January 7th 2023. Applications will be considered by the Principal Investigators of the VAE project at URJC (Prof. Billhardt and Prof. Ossowski) on a rolling basis.

**About the CETINIA Research Centre at URJC**

The CETINIA research centre aims at promoting R&D&I in the field of Artificial Intelligence and IT at URJC. It currently comprises 6 research groups and over 60 faculty members. To successfully carry out its research, technology transfer, and dissemination activities, CETINIA relies on a broad multinational team of researchers and practitioners in the field of Intelligent Systems, Machine Learning, Software Engineering, and Operations Research, among others. CETINIA is involved in research projects with industrial as well as public funding, from regional, national, and European sources.

University Rey Juan Carlos is a young public university with several campuses in the greater Madrid. In its 25 years of operation, it managed to grow to 46.000 students, being currently the second largest among the six public Universities in Madrid. CETINIA is located in the campus of Mostoles, where the Presidency of the University is located. Mostoles is the second-largest city in population belonging to the autonomous community of Madrid. It is located 18 kilometres southwest from central Madrid, which can be easily reached by metro, train, or bus.