

Post-doc position in Industrial Wireless Networks

Job description

The position is offered in the framework of the European H2020 AUTOWARE (Wireless Autonomous, Reliable and Resilient Production Operation ARchitecture for Cognitive Manufacturing, <http://www.autoware-eu.org/>) research project. The project will develop IoT/5G and cloud networking solutions for improving the digitalization and flexibility of factories in the context of the Industry 4.0. Within the project, the UWICORE laboratory at UMH is in charge of designing reliable and low-latency wireless communications and networks to support the development of the Industry 4.0. The post-doc will work on the following topics:

- Design of networking and communications protocols for low latency and high reliability industrial wireless communications (layer 2 and layer 3 protocols, cross-layer, multi-hop communications).
- Hybrid and self-organizing network management schemes to support distributed industrial wireless networks and reduce the time needed to reconfigure and reprogram them.
- Definition of an architecture for industrial heterogeneous wireless networks to support the ubiquitous connectivity of CPPS and allow for efficient data management and distribution.

The work will require the design and evaluation of protocols mainly through simulations and numerical evaluations. Theoretical analyses can be also expected.

Candidate profile

Candidates should have a PhD in Telecommunications, Electrical, or Computer Engineering (or closely related disciplines), and a proven track record of publications in relevant journals and conferences. Preferably, the candidate should have done the PhD or have experience in one of the following research topics: industrial wireless networks, IoT, 5G, wireless sensor networks, cyber-physical systems, mobile and wireless networking, wireless network planning, design and optimization. The candidate should have good programming and simulation skills. Good written and spoken communication skills in English are required, as well as team working skills and availability to travel.

Conditions

- Application deadline: continuous evaluation until the position is filled
- Salary: EUR 30300 annual gross salary. Contract: up to September 2019
- Starting date: ASAP from march 2017 (final call)

Application

Interested candidates should send by email to Prof. J. Gozalvez (j.gozalvez@umh.es): 1) full CV; 2) research statement (2 pages limit) indicating the motivation, understanding and knowledge on the topic of the position as well as its possible relation with the previous research experience of the candidate; 3) electronic copy of the three more relevant publications of the candidate; 4) up to three contacts persons that could act as references if needed. Please send the email with the topic 'AUTOWARE post-doc position'.

Applications will be continuously evaluated upon reception, and phone interviews will be organised with the selected candidates until the position is filled. For any additional information, you can send an email to j.gozalvez@umh.es

Location

The UWICORE (Ubiquitous Wireless Communications Research) laboratory is part of the Universidad Miguel Hernández de Elche (Spain), www.uwicore.umh.es. The lab activities focus on: industrial wireless networks, vehicular networks, and device-centric wireless communications and networking (including multi-hop cellular networks and D2D). The laboratory has significant expertise in the design of wireless networking protocols, resource management and medium access control techniques, system design and optimization, and experimental prototyping. The lab has a strong track record of collaboration with industry, and participation in collaborative European and national projects.