

## Company Description

A leading knowledge transfer centre providing competitive value to companies. IKERLAN is a Basque (<https://www.basquecountry-tourism.com/>) leading knowledge transfer technological centre providing competitive value to companies. We seek for excellence in R&D&i, thanks to the continuous adaptation to the needs of our customers and the proximity with the business reality. Faithful to our mission, we have been working daily since 1974 to develop solutions that allow our customers to become more and more competitive. We are a cooperative member of the MONDRAGON Corporation (<https://www.mondragon-corporation.com/en/>). Thanks to a unique cooperation model, which combines technology transfer activities, internal research and training of highly qualified personnel, IKERLAN is currently the trusted technological partner of major companies in the country. To meet our goal, we are structured in three technological specialisation units: • ELECTRONICS, INFORMATION AND COMMUNICATION TECHNOLOGIES • ENERGY AND POWER ELECTRONICS • ADVANCED MANUFACTURING IKERLAN is a centre that is dynamic and open to the world. We are an agent credited by the Basque Network of Science, technology and Innovation, and we have a major cooperation network integrated by renowned European

## Information

 Deadline: 2019-06-15  
 Category: Business  
 Province: Gipuzkoa  
 Country: Basque Country  
 City: Arrasate

## Company

Ikerlan



## Main functions, requisites & benefits

### Main functions

As a research scientist, you will be working on the future embedded system applications, with a special focus on industrial communication and its requirements (robustness, availability, determinism, latency, etc). We are looking for a person with the eagerness to transfer and apply world-class academic research into an industrial environment. You will work within a highly motivated team of researchers. As a part of IKERLAN you will work in dynamic, motivated and creative teams with a wide range of experience and competence, and access to highly advanced laboratory facilities. You will enjoy the best combination of university-like research and industrial leading research. The key focus will be the development of innovative wireless and/or wired connectivity solutions. These include the transfer, configuration and operation of mission-critical automation systems for the industrial applications in the context of Industrial IoT: Contribute to projects that turn state-of-the-art research results into effective solutions for our end industrial customers, academic and research partners.

Gather requirements, develop innovative concepts, scout emerging technologies, design architectures, create models, validate concepts by prototypes, and demonstrate them.

Disseminate your results in high impact scientific publications, patent applications, and technical reports.

Build a network within Ikerlan as well with external partners and become known for your skills. RESPONSIBILITIES Assessment and improvement of leading wireless technologies Research in multidisciplinary teamwork within RF, cyber physical systems and software Theoretical analysis, simulation and experimental wireless network development in the field of real time factory communication Development of testbeds to realize various wireless sensor networks including data analysis

### Requisites

For this role, you have a degree in communication systems, network sciences, information theories, electronics/electrical engineering or a related field, preferably also either academic experience (PhD) or some years of professional experience with innovative tasks. You have good communication skills and a team player attitude, as well an eagerness to learn and develop on new topics. You have more than 10 years of experience in: Industrial Ethernet or Industrial wireless technologies Vehicular communication skills will be very valuable Network management, network routing and switching, as well as wireless media access Programming skills including software (e.g. C, C++, C#, Java, Matlab, and VHDL), hardware (e.g. Zynq, MPSoC, Raspberry Pi, Arduino) and operation of instruments Embedded Linux experience at user and kernel level Knowledge in at least one of the following areas: Distributed real-time systems Domain knowledge in automation and railway industries as well as communication standards like WirelessHART, Bluetooth, WiFi, TSN, PROFINET, EtherCAT, 4G/5G URLLC, LTE V2X, ITS-G5, etc.