Bizkaia talent

RESEARCHER/SENIOR ENGINEER IN NEUROREHABILITATION/WEARABLE ROBOTICS

Company Description

Tecnalia Corporation has been set up as a multidisciplinary Tecnology Corporation, of a private and independent nature, with the mission to contribute value and wealth to the society in general, and to the business base in particular, through research, technological development and innovation in an international context. The Corporation offers the people comprising it a framework for competence and professional development by generating opportunities for their professional future. Shared knowledge, making use of the potential and diversity of an eminently creative, innovative, and professional group are the principles underpinning our culture and values.

Information

Deadline: 2018-11-15
Category: Business
Province: Gipuzkoa
Country: Basque Country
City: SAN SEBASTIAN

Company

Tecnalia Research and Innovation

tecnalia

Main functions, requisites & benefits

Main functions

Tecnalia is the largest private Research, Development and Innovation (R+D+i) group in Spain and one of the leading ones in Europe, with a staff of over 1,400 people and a turnover of 110 million euros. Tecnalia's lemma is to develop technologies that can be converted in value and benefits for our clients and the overall society. One of the main targets of any Tecnalia project is the technology development and transfer towards the industry. The Health Division at Tecnalia designs and develops, among other things, advanced medical devices to treat neurological diseases to enable elderly, disable or injured persons to compensate or accelerate the recovery of their lost functions (such as mobility) and to facilitate personal autonomy while improving their quality of life. In addition, Tecnalia Health develops novel robotic devices both for the healthcare industry and for worker protection and wellbeing in industrial settings. The main research lines of the Neuro-Rehabilitation Department are: 1. Functional electrical stimulation. Design and development of selective transcutaneous FES standalone devices or in combination with wearable robotic devices. Development of multi-pad electrodes. 2. Functional assessment. Balance assessment, postural control and biofeedback systems; Upper extremity functional assessment, muscular activity, functional performance; Activity monitoring, user intention detection; Connected medical devices and data analytics 3. Upper-limb rehabilitation robotics. Design and development of actuated and non-actuated robotic devices for the rehabilitation process, therapy, assessment and assistance. The Medical Robotics Department has on-going projects that include: 1. Teleoperated Robotics. Development of intuitive user interfaces for teleoperation, including haptic feedback, that are tuned to the physiological and perceptual capabilities of the human operator. 2. Industrial Cobots. Surgical and Industrial robots designed to work in synergy with human co-workers (e.g. surgeons or assembly-line workers), combining the strength and precision of the robot with the adaptability and reasoning capabilities of the human. 3. Exoskeletons and Cobots for Worker Safety. Development of control strategies and physical human-robot interactions to protect the safety and wellbeing of human workers in physically demanding vocations, including healthcare professionals and assembly-line workers. We are looking for a robotics researcher/senior engineer with strong hardware development skills, background to conceive and develop advanced rehabilitation robotic and wearable robotic systems, working mainly (but not only) to design, develop and implement advanced technologies for Neurorehabilitation and Wearable Robotics. Examples are rehabilitation robots for reaching, hand grasp and manipulation, wearable actuation technologies, haptic feedback for teleoperation, exoskeletons for medical and industrial applications. The person will be responsible for the excellence and the execution of projects in which he/she is strongly involved, both in terms of time and cost constraints. The person will work within a team of researchers/engineers within a private research center, be included in identification, definition and acquisition of new business opportunities, recognize expressed or unexpressed requirements from our clients, define and evaluate the cost of proposed solutions in commercial offers, and contribute to the conception and elaboration of proposals for national and European research grants. Who are you? Independent and dedicated, you are innovative and eager to move next generation rehabilitation or wearable robotics into real world applications, working on the