


Company Description

Tecnalia Corporation has been set up as a multidisciplinary Technology 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: 2019-04-11
 Category: Business
 Province: Bizkaia

 Country: Basque Country
 City: Derio

Company

Tecnalia Research and Innovation

tecnalia

Main functions, requisites & benefits

Main functions

Automotive Business Area, within the Industry and Transport Division in TECNALIA, is looking for a specialized engineer in the development of control systems for applications of power electronics into the field of electric and hybrid propulsion systems. Specifically, we are searching for professionals with experience in development of complex control systems, from the beginning of the control until its implementation on embedded platforms. The vacancy belongs to the Industry & Transport Division, in particular to Automotive Business Area which mission is to create value through technology for a sustainable, safe and intelligent transport. In this line of research, electronics and control become very important compared to the conventional solutions based on combustion engines, being necessary a new profile in the future engineers in propulsion for hybrid/electric vehicles. Within the transport unit we are searching for a professional with 4-5 years' experience within the field of power electronics (preferably applied to traction systems) interested in doing applied research activities within the field of electrification, willing to teamwork. Modelling, as well as test and systems control development under platforms like Mathworks or National Instruments is required. Experience in models based design will be an asset.

Requisites

Qualifications: BsC in Electronics, automatic, telecommunications or similar Engineering. MsC would be taken into account, preferably in control. Languages: Fluency in spoken and written English is required. Minimum experience: we are looking for a professional with proven experience in the development of electric machines control. Proven knowledge in modelling and simulation of power inverters as well as electric machine control (FOC type, DTC or optimal control) and sensorless algorithms/techniques as well as modulation for optimization of benefits of the set engine+inverter, will be necessary. Knowledge in electronic development of engine controllers using advanced techniques of quick prototyping on dSpace platforms or equivalent and implementation, as well as validation over DSP and microcontrollers from Texas instruments family and Freescale preferably. Knowledge of implementation on FPGA will be valued. Experience in regulations applied to the sector (IEC-SIL, ISO-ASIL) will be valued positively. Modelling and simulation of power plants where inverters to be developed get integrated in such way that all performance requirements are validated will be considered positively. Others: Experience of SW development on DSP TI, Freescale and similar platforms. Knowledge of modelling and simulation of electrical machines and power inverters. Knowledge in traction problems of vehicle applications -C programming for microcontroller and DSP. Will be taken into account: Phd or MsC degree in power electronics, Previous involvement in research projects, in european program framework or other competitive public founding projects. Knowledge of German and/or French will be considered positively.