



The **Centre Tecnològic de Telecomunicacions de Catalunya** is a supra-university research center established in Barcelona (Spain) which is devoted to basic and applied R&D related to the physical and lower layers of communications systems. At present time, the CTTC is interested in filling the following *Engineering* positions in communication technologies.

ENGINEERING POSITIONS:

We are looking for (1) **skilled engineers with previous work experience** in at least one of the fields listed for each position and, (2) **graduate engineers** with a solid academic record and willingness to develop a career in those areas.

- ❑ Research Engineer - Access Technologies (1 position): Design and development of a system-level simulation platform for wireless communication systems. Knowledge in object-oriented programming (C++), SystemC, basic knowledge in wireless network communication protocols and layer 1-2 functionalities (radio resource management, multiple access schemes, etc.)
- ❑ Networking software engineer (2 positions) with emphasis on Linux (or Unix-like) Networking Architecture (from the kernel network device drivers up to the TCP/IP socket): Unix-like open source operating system internals (networking protocol stack and device drivers) and network programming in C. Other valued merits are: Software Engineering and software project management, UML, Linux development tools, C++, Java, Otcl, Modeling and simulation techniques, VoIP (mainly SIP) and/or Basic knowledge of system administration.
- ❑ Hardware engineer (2 positions): Mentor Graphics software package or equivalent, FPGA programming in VHDL language (knowledge of Xilinx's ISE environment is highly appreciated), familiarity with DSP architectures in particular TI's. Preference will be given to candidates with experience in RF implementation/interconnection of lab equipment with FPGA/DSP boards or PCs.
- ❑ MATLAB programming engineer (2 positions): Programming of communication systems with MATLAB. General knowledge of signal processing for communications is appreciated.
- ❑ Radiofrequency engineer (1 position): Design of active components for RF/microwave chains (e.g. mixers, oscillators and amplifiers); interest in MMIC/RFIC technologies and appropriate CAD tools. Preferably with some knowledge in areas such as semiconductor processing capabilities, design and layout rules and tools, library designs, simulation tools, device and circuit element models, design and processing flow and test methodology.
- ❑ RF lab engineer (1 position): Test&measurement instrumentation for RF/microwave devices, wedge bonding and/or operation of probe stations (preferably Süss Microtec), hands-on experience in the manipulation of measurement components (e.g. cables, connectors, attenuators, couplers, baluns, loads, etc) and calibration methodologies (e.g. for oscilloscopes, network analyzers, digital multimeters and spectrum analysers). Previous experience on the interconnection and programming of measurement equipment (GPIB, Visual Basic or Visual C++) is highly appreciated.

QUALIFICATIONS AND EXPERIENCE

Applicants must hold an **MSc/Engineering degree** in telecommunications, electronics, computer science or related fields, capacity of carrying out innovative research independently. Experience in R&D or industrial projects carried out in the context of research institutions and centres is a plus.

CONDITIONS

The positions are permanent. For each profile, both junior and senior profiles are sought. The rank and gross salary in the range 22,000–25,000 €/year (junior) and 27,000–30,000 €/year (senior) will be determined according to qualifications and work experience.

Please, submit applications electronically including a **resume, academic ratings, list of publications** (if applicable) and, preferably, the names and contact information of **three referees**, to:

<http://www.cttc.es/rrhh>

Applications will be evaluated in batches every 3-4 months until the positions will be filled. March' 07