

CALL 21-2024-1 RESEARCH ENGINEER FOR PACKET-OPTICAL NETWORKS AND SYSTEMS LAB

Who are we looking for?

The Packet Optical Networks and Services (PONS) Research Unit is searching for interested candidates in a Researcher position.

For more information about the PONS Research Unit click here (<https://www.cttc.cat/packet-optical-networks-and-services-pons/>).

We are looking for a highly motivated, enthusiastic, empathic person, with passion for research and desire to learn and explore new technologies, aiming at significantly improving her or his professional career in a stimulating environment and within a dynamic and internationally recognized research group.

The successful candidate will join the PONS research unit to carry out various tasks mainly conducted in the PONS Lab, related to the maintenance and continuous upgrade/development of ADRENALINE testbed[©]. The candidate is required to provide support to the research team in various activities. Specifically, examples of such tasks and activities are:

- Fault management and maintenance of rackmount and desktop servers, with Windows and Linux OS, as well as network electronics equipment.
- Acquisition of expendable material for the replacement and update of hardware components (e.g. memory expansion, motherboards, disks, power supplies).
- Rack installation and labelling of new equipment, including start-up, and connection to the management network of ADRENALINE.
- Installation and regular updates of the operating systems and software.
- Configuration and maintenance of network electronics equipment (e.g., Cisco packet switches with IOS).
- Installation and management of server monitoring tools (e.g. Prometheus).
- Research on DC infrastructure management software.
- Maintenance and update of the various equipment databases (e.g. inventory with technical equipment sheets, failure/maintenance tickets, VLANs and IP address list, diagrams of rack deployment, Wiki).
- Creation of image and backup repositories for servers and network equipment.
- Market study of components and equipment to be purchased for research. Assistance to purchase/reception of new equipment.
- Support in the development and installation of prototypes of electro/optical transmission systems for the packet/optical transport network of ADRENALINE (e.g., microcontroller/microprocessor programming, chassis machining).
- Help with the repair of electro/optical transmission systems equipment/prototypes (e.g., fault diagnosis, components replacement) in ADRENALINE.
- Preparation of setups for experimental demonstrations.
- Support in the organization of events.

What do we offer? :

- Research position in the framework of the Spanish project (MICIU) RELAMPAGO (PID2021-127916OB-I00-9), with duration till 31/08/2025.
- We offer an indefinite contract of scientific technical activities. Once this project will finish, you will join other projects in the same research line, subject to budget availability.
- Annual gross salary according to the profile of the candidate.
- Full-time contract: 7,5 h/day. Flexibility
- Expected professional category: R1.
Exceptional candidates may be considered even if they do not meet all the requirements. In this case the professional category will be based on the qualifications and experience of the applicant according with CTTC professional categories procedure (<https://www.cttc.cat/wp-content/uploads/2023/09/Update-professional-categories.pdf>).
- Tenure track: Career progression with possibility of stabilization trough a permanent structural contract
- Prospect start date: November 2024
- Continuous training, access to lab facilities, state of the art infrastructure and polyvalent working spaces, participation in scientific events and R&D projects, complementary skills development.
- Possibility to enroll in a Phd Program (Phd fees paid by CTTC)
- Professional career promotion in case to obtain PhD
- **We have great benefits for employees:**
 - Paid time off: vacation (33 working days per year), holidays, sick and parental leave and more
 - Up to 3 days of Telework per week (2 fixed + 1 upon request). Other requests may be studied to accommodate special needs.
 - Flexible working hours for work-life balance
 - Tax-free optional benefits: restaurant ticket, nursery ticket, transport pass, private health insurance for employees and family.
 - Career path promotion (either professional category and/or annual gross salary)
 - Annual productivity upon performance
 - Possibility to complement the salary with personal grants

Qualifications and Experience

- We are looking for a highly motivated, enthusiastic, energetic person, aiming at significantly improving his or her career perspectives in both public and private sectors. The successful applicant should have the competencies of R1 category.
- **Required qualification/skills/ experience:**
 - Applicants must have a MSc degree in Telecommunications, Electronic Engineering, Computer Science or a closely related field.
 - English skills.
 - Ability to work autonomously and be an excellent team player.
 - Experience in administration of operating systems and in computer hardware.

- Experience with network electronics equipment.
- Experience with rack deployment.

- **Other skills that are valuable, but not mandatory are:**
 - Testbed maintenance/upgrade.
 - Experience with prototypes assembly.
 - Programming skills (e.g., C, Python) for microprocessors/microcontrollers.

Even if you do not meet all the requirements, we encourage you to apply.

The candidates' past performance but also future potential will be considered as criteria for selecting researchers.

How to apply?

All applications must include:

1. A complete CV, including a list of publications and the contact details of two potential referees
2. MSc degree
3. Cover letter stating the motivation and suitability of the candidate.

The application documents must be submitted in pdf format through this online application.

ONLY APPLICATIONS VIA WEB <https://www.cttc.cat/talent/careers/job-openings/> WILL BE TAKEN INTO CONSIDERATION.

CVs and any other information gathered during this process will be handled confidentially

Who are we?

- The Center Tecnològic de Telecomunicacions de Catalunya (CTTC) is a non-profit **public sector** research institution dedicated to fundamental and applied research activities, focused mainly on technologies related to the physical, data link and network layers of communication systems and Geomatics.
- CTTC received the “HR Excellence in Research” award in 2015 from the European Commission and successfully passed into the Award Renewal phase in 2023. This is a recognition of the Institute’s commitment to develop a Human Resources Strategy for Researchers ([HRS4R](#)), designed to bring the practices and procedures in line with the principles of the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers ([Charter and Code](#)). Our institution’s comprehensive analysis and HRS4R action plan meet all the requirements of progress and quality of our HR policies. CTTC promotes itself as a provider of a stimulating and favourable work environment for researchers.
- The CTTC is located in the beautiful Mediterranean Technological Park of Castelldefels, a science park that houses the Polytechnic University of Catalonia, research institutions, innovative companies and startups. The PMT-UPC is located 10 minutes' walk from the beach and the city center of Castelldefels, also close to childcare centers, public schools and the best international schools. It can be reached by car, train (RENFE) and various bus lines.

- We have 2 buildings on campus, with state-of-the-art facilities, comfortable work spaces, meeting rooms, and multipurpose spaces, as well as social spaces.
- The institute has a **multicultural environment** with more than 130 members (scientific, technical and administrative staff) from all over the world.

CTTC offers and promotes a diverse and inclusive environment and welcomes applicants regardless of age, disability, gender, national origin, race, religion, or sexual orientation.

The CTTC seeks to increase the presence of women in those areas where they are underrepresented and therefore explicitly encourages them to stand as candidates.

It is also committed to increasing the number of people with disabilities in its workforce and therefore encourages their applications.