

Software Developer

Reference: 26-09-00048

The Forest Science and Technology Centre of Catalonia (CTFC) is seeking a Senior ICT Specialist with a Full-Stack profile, experienced in software development, database management, web architectures, geospatial systems, and advanced computing environments.

The selected candidate will join the CTFC ICT development area to participate in research, innovation, and technology transfer projects related to forest management, bioeconomy, biodiversity, landscape dynamics, and climate change adaptation.

The position combines full-stack development, scientific programming, forest growth simulation, Decision Support Systems (DSS), big data processing, georeferenced databases, APIs, data visualization, and application deployment in cloud, DevOps, and high-performance computing environments.

Experience in projects integrating simulation models, forest data, geographic information, web services, analytics platforms, and digital tools supporting land-use planning and management will be highly valued.

Located in Solsona (Pre-Pyrenees, Catalonia), CTFC employs approximately 200 staff members, produces more than 140 scientific publications annually, and manages an annual budget of around €12 million. Its research and knowledge transfer activities are structured around four programs: Multifunctional Forest Management, Landscape Dynamics and Planning, Biodiversity Management and Conservation, and Bioeconomy, Health and Governance. More institutional information is available at: www.ctfc.cat.

TERMS OF THE APPOINTMENT

1. Immediate incorporation.
2. Permanent scientific and technical activities contract.
3. Full-time position (37.5 hours per week).
4. On-site position at CTFC facilities in Solsona.
5. Flexible on-site work arrangements available after successfully completing the probation period.
6. Salary commensurate with qualifications and experience.

KEY RESPONSABILITIES

1. Full-stack software development.
2. Scientific programming.

3. Forest growth simulation and development of Decision Support Systems (DSS).
4. Large-scale data processing and analysis.
5. Creation, maintenance, and optimization of georeferenced databases.
6. API development and integration.
7. Data visualization and deployment of applications in cloud, DevOps, and high-performance computing environments.

BASIC REQUIREMENTS

1. Higher Vocational Training Diploma (CFGS) in Web Application Development (DAW), Multiplatform Application Development (DAM), or equivalent education related to software development, or a higher degree qualification.
2. At least 3 years of demonstrable professional experience in application development or similar roles.
3. Knowledge of programming and software development.
4. Experience with version control systems, particularly Git/GitHub.

DESIRABLE REQUIREMENTS

1. Experience with web development frameworks and libraries, especially React, Vue, or Angular.
2. Experience with programming languages such as PHP, Python, Java, or JavaScript.
3. Experience with backend environments and frameworks such as Node.js (NestJS) or FastAPI (Python).
4. Experience with HTML, CSS, and web interface development.
5. Experience in developing and consuming REST APIs and service integration.
6. Experience in process automation through scripting.
7. Knowledge of networking and systems administration.
8. Advanced SQL knowledge and experience with databases such as MySQL, PostgreSQL, Oracle, or SQL Server.
9. Knowledge of Docker, CI/CD, and integration and deployment tools.
10. Knowledge of Agile development methodologies such as Scrum or Kanban.
11. Experience in developing, deploying, and maintaining applications in production environments.

SOFT COMPETENCES

1. Strong planning and organizational skills.
2. Ability to work effectively in multidisciplinary teams.
3. Excellent communication skills with technical staff, researchers, and external stakeholders.
4. Ability to transform scientific or technical requirements into functional digital solutions.
5. Responsible, autonomous, and highly committed professional attitude.
6. Initiative and proactive mindset.
7. Flexibility and adaptability.
8. Results-oriented approach and commitment to code quality.
9. Interest in applied research, forest management, and technology transfer.

CONTACT

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<https://ctfc.cat/transparencia.php>

SELECTION PROCESS AND CRITERIA

The selection process will be carried out through a two-stage procedure. The first stage will primarily target candidates from the consortium entities, given the nature of the position. The second stage will include the remaining candidates who have correctly submitted their application within the established deadline.

- **Applications:**

Candidates must submit a CV and a motivation letter via www.ctfc.cat/registre.php by **25 September 2026 at 14:00**, indicating the reference code of the job offer. Applications submitted through portals other than the CTFC's own job board will not be accepted, nor will those received through the SOC that do not follow the instructions specified in the call itself.

The position subject to this call may be declared vacant if the selection committee considers that, despite the existence of candidates who meet the minimum requirements, none is deemed suitable for the position.

The CTFC guarantees an open, transparent, and merit-based selection process (OTM-R) for all registered applications, thus avoiding any bias based on gender, origin, age, ideology, or any other potentially discriminatory circumstances. Inclusion policy: Priority will be given to candidates with a recognized and accredited disability of 33% or higher, provided that the disability is compatible with the proper performance of the position.

Estimated timeline	
15 working days	Publication and dissemination of the job offer: CTFC website, SOC Office, and other communication channels.
Following 2 working days	Pre-selection: verification of compliance with the minimum requirements and assessment of desirable conditions. Informative email sent to non-eligible CVs.
Following 2 working days	Selection committee meeting: interviews with shortlisted eligible candidates. Minutes of the Selection Committee stating the name of the selected candidate and the reasons for the selection. Publication of the resolution on the CTFC job portal identifying the selected candidate. Informative email sent to interviewed eligible candidates who were not selected.
Following 1 working day	Submission to Human Resources of the official documentation required to process the employment contract and coordination of the contract start date.
October 2026 (approximately)	Start of the contract.