IREC

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Area: Energy Efficiency in Systems, Buildings and Communities
Group: Thermal Energy and Building Performance
Head of Group: Jaume Salom Tormo

Position: Recognised Researcher/Engineer – R2 Pre-consolidated
                   Urban Modelling Software Programmer

Descripció

The Thermal Energy and Building Performance Group announces a position of **Pre-Consolidated Recognised Project Engineer (R2.1.3) in the field of Urban Modelling with significant knowledge and experience in Python programming.** The work will be embedded in the Thermal Energy and Building Performance Group which main research subject is the integrated and systemic approach towards positive energy buildings and communities. The group's vision is to investigate in solutions and strategies that accelerates the reduction of greenhouse gas emissions in the building sector through human-centred design, energy efficiency measures, integration and management of energy systems, particularly distributed renewable sources in the built environment as part of urban communities.

The candidate will participate as software developer engineer in technical work of research projects in fields related with different levels of energy models for the built Environment and integration in computational tools. Activities where he/she will be involved are programming of codes applied to dynamic simulation of buildings integrated in smart infrastructures The candidate will work in EU international projects within the subject of Retrofitting of Buildings, Positive Energy Districts and Local Energy Communities. One of the projects is H2020 SYN.IKIA project (www.synikia.eu). Other project is ARV project (https://greendeal-arv.eu/). Properly elaboration of reporting reports and collaboration in articles for scientific publication will be also carried out.

Requirements

We are looking for a methodical and rigorous person with a scientific spirit, excellent team-player and results-oriented candidate with good communication skills.

Essential:

- Master Sciences Degree in Mechanical Energy / Physics or Computational Sciences
- At least 3 years of experience in professional/research projects
- At least 1 year of Experience in EU and/or international research projects
- Knowledge in TRNSYS
- Advanced knowledge in programming languages: Python
- Experience in data science tools: R, Python (NumPy, SciPy)

<u>Preferred:</u>

- Advanced knowledge of HVAC systems, especially Heat Pumps
- Advanced knowledge in PostGresSQL+PostGis and GIS-tools (e.g, QGIS, ARCGIS)
- Initiative in Research and Innovation
- Fluent English is essential

We offer

We offer the chance to become part of an exciting and consolidated team, with international recognition, for developing cross-cutting projects in science and technology, oriented towards excellence. We also offer a research environment comprised of highly qualified and motivated professionals. Salaries will be paid in accordance with the IREC's salary policy, depending on the candidate's qualification and professional experience. Expected category: Recognised Researcher / Project Engineer (R2.1.3)

Workplace. Barcelona

Application

Applicants should send a detailed CV and a letter of motivation to irecjobs@irec.cat.

The application deadline is January 16th 2023

Please indicate "**2023 – Urban Modelling Ref. 164/2022**" in the subject