

ANNOUNCEMENT FOR PROVISION OF THE WORKPLACE

VAC-2022-85 – Research Engineer 3 NextSim project

Number of places: 1

Category: Research Engineer (RENG 3)

Workplace: Barcelona

Salary (gross): 32.202,88 €

Weekly working hours: 40 hours

Duration: 7 months

Functions to be developed:

In the frame of the research project NextSIM, the candidate will be working in following tasks:

- Development of parallel mesh and results compression, simplification and visualization algorithms for remote visualization of simulation results, and their integration in the min-apps / mini-servers ecosystem of the project.
- Visualization and post-processing of simulation results of the project.
- Management of distributed data coming from numerical simulations in cloud-based architectures.

This vacant is part of the I+D+i PCI2021-121945 project, funded by MCIN/ AEI/10.13039/501100011033/ and by the “European Union NextGenerationEU/PRTR”.

Required skills:

- Computer engineer / Engineer with expertise in graphics, computational geometry, parallel computation.
- Experience in AGILE methodologies for programming.
- Experience in C++/OpenMP/Python/Typescript, Linux, Windows.
- Knowledge of vtk.js (or three.js), angular, docker and AWS.
- High English level.

Other valued skills (not mandatory):

- Experience in Continuous Integration (CI) and Continuous Deployment (CD) methodologies for cloud-based infrastructures.
- Knowledge of FEM, numerical methods, pre and post-processing.
- Knowledge of Paraview, visit, MeshLab, CAD programs
- Knowledge of Multiphysics solvers like Kratos Multiphysics, OpenFoam or similar

Qualification system:

The requisites and merits will be evaluated with a maximum note of 100 points. Such maximal note will be obtained summing up the following points:

- **Academic degrees:** 20%
- **Formation and further education:** 15%
- **Professional experience:** 15%
- **Programming skills:** 10%
- **Catalan Language skills:** 5%
- **English Language skills:** 5%
- **Selection tests and interview:** 30%

Candidates must complete the "Application Form" form on our website, indicating the reference of the vacancy and attaching the required documents.

The deadline for registration to the offer ends on January 16th, 2023 at 12 noon.

The preselected candidates may be requested to send the documentation required in the "Requirements" and "Merits" sections, duly scanned, and may be called to go through selection tests (which might be of eliminatory nature) and / or personal interviews.

