

ANNOUNCEMENT FOR PROVISION OF THE WORKPLACE

VAC-2023-09 – Scientist/Developer in Computational Mechanics High Performance computing

Number of places: 1

Category: RENG 2

Workplace: Barcelona

Salary (gross): 38.884,97 euros/year

Weekly working hours: 40 per week

Functions to be developed:

In the frame of the research project TOPFSI-APP, CIMNE is developing a new software platform for the topology optimization of structures subject to fluid structure interaction. Areas of application include civil (wind generators, bridges), industrial (3d printing) and aeronautical (airfoil optimizations) engineering. The candidate will participate in the development of such platform, with tasks ranging from the research, development and implementation of new computational mechanics algorithms (topology optimization of structures subject to large strains, fluid structure interaction coupling algorithms), to the development of the graphical interface and the migration of the code to a Windows environment. Code development will be done both at the individual PC and the High Performance Computing clusters levels, and the candidate will be in charge of migrating some existing implementations to the HPC environment.

The candidate will join the Fluid Mechanics and Industrial Manufacturing Processes groups at CIMNE, an international team of more than 20 researchers and engineers devoted to computational mechanics modeling and development of software for engineering.

Required skills:

- Engineer with experience in software development
- Background in computational mechanics
- Development in both Windows and Linux platforms

Other valued skills (not mandatory):

- Fluency in English
- Experience in developing in TCL-TK, GiD software platform
- Experience in High Performance Computing, Message Passing Interface (MPI)
- Master's or Ph.D. in similar field of job description

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 qualifications: 30%
- Training and improvement: 20%
- Professional experience: 20%
- Knowledge of English: 10%
- Selective tests and interview: 20%

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 May 9th, 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.

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