CIMNE
EXCELENCIA SEVERO OCHOA
International Centre for Numerical Methods in Engineering
cimne@cimne.upc.edu
+34 93 401 74 95
CIMNE - Edifici C1 Campus Nord UPC
C/ Gran Capità, S/N
08034 Barcelona, Spain

ANNOUNCEMENT FOR PROVISION OF THE WORKPLACE

VAC-2022-13 – Research Engineer in High Performance Scientific Computing

Number of places: 1

Category: RENG6

Workplace: Castelldefels

Salary (gross): 17.174,87€

Weekly working hours: 40 hours/week

Contract type: Temporary until 30/06/2022

Duration: 3,5 months

Functions to be developed:

The PhD position is for the development and implementation of new algorithms to solve problems in transient multiphysics applications exploiting Large scale computing.

This position is open within the frame of the project:

> A Stochastic Optimization Framework for Aircraft STructural design (SOFAST)
>
> The main goal of SOFAST is to develop new algorithms and computational implementations to perform robust multi-objective topology optimization efficiently exploiting HPC resources, to enable their application to optimal aircraft design.

Required skills:

- A master degree in applied mathematics or engineering related to the fields of computational mechanics or computational mathematics.
- Programming experience in scientific computing.
- Writing and communication skills (oriented towards the production of scientific articles and presentations).

Other valued skills (not mandatory):

- Advanced programming skills, e.g. distributed parallel programming, object-oriented and/or functional programming.

cimne@cimne.upc.edu
+34 93 401 74 95
CIMNE - Edifici C1 Campus Nord UPC
C/ Gran Capità, S/N
08034 Barcelona, Spain

- Experience in finite element modelling and (non)linear multilevel solvers. A good knowledge of the mathematical abstractions behind these methods will be positively considered.

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:

- Publication and career track: 10%
- Previous research and academic experience in the field of the position: 10%
- Programming skills: 10%
- Writing/communication skills: 10%
- Interview: 60%

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 March 8th, 2022 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.