JOB VACANCY ANNOUNCEMENT

VAC-2023-65 – Engineer for software development, code validation and verification in a high performance computing environment (PRIMUS project)

Number of places: 1

Category: Research Engineer (RENG 5)

Workplace: Campus Nord UPC, Barcelona, 08034

Salary (gross): 22.219,99€

Weekly working hours: 40h/week

Duration: Until the end of project

Functions to be developed:

This position is to work on the project "PRIMUS: Printing pattern based and MultiScale enhanced performance analysis of advanced Additive Manufacturing components", with reference PID2020-115575RB-I00 funded by the Spanish Ministry of Science, Innovation and Universities.

More information about the project:

https://www.cimne.com/sgp/rtd/Project.aspx?id=906

The main tasks will be:

1. Development of innovative numerical methods for the analysis of the performance of thermoplastic components manufactured via Fused Filament Fabrication
2. Implementation of a multiscale approach based on Reduced Order Modeling (ROM) techniques for characterization of the FFF parts.
3. Design and modelling of components based on auxetic structures: Advanced Additive Manufacturing Components
4. Calibration of the software vs experimental results.

The position is compatible with the development of a PhD thesis.

Required skills:

- Master degree in Mechanical Engineering
- Knowledge of scientific programming (Fortran 2008 Object Oriented, Python)
- Knowledge of numerical methods (preferably, FEM)
- Fluency in English

Centre Internacional de Mètodes Numèrics a l'Enginyeria ® Q5850006G

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Other valued skills (not mandatory):

- Experience in Parallel Computing (HPC)
- Basic knowledge of the field of the position
- Fluency in Spanish

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: 30%

- Training and development: 20%

- Professional experience: 5%

- Language skills: 5%

- Communication/Teaching skills: 40%

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 October 24th, 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.