International Centre for Numerical Methods in Engineering

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CIMNE - Edifici C1 Campus Nord UPC
C/ Gran Capità, S/N
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JOB VACANCY ANNOUNCEMENT

VAC-2024-18 - Innovation Leader in Cardiovascular modelling

Number of places: 1

Category: Innovation Developer 2 o 3

Salary (gross): from 28.747,10€ to 34.496,53€

Working hours: 40h/week

Workplace: Barcelona (potential work opportunities in Valladolid)

Description:

At CIMNE's Biomedical Engineering (BME) group, we are at the forefront of merging computational modelling with medical sciences. We specialize in transforming medical imaging into three-dimensional digital twins, enhancing precision in diagnostics and enabling virtual treatment simulations. Our software solutions automate the design of optimal medical devices, leveraging cutting-edge numerical simulation technologies. Employing also advanced numerical simulation technology, we significantly enhance the design of cardiovascular medical devices during the pre-prototype stage, ensuring more personalized and secure patient care. We invite passionate profiles to contribute to our mission of personalizing and optimizing healthcare. Discover how your expertise can drive innovations that transform patient care in a clinical setting.

Functions to be developed:

The selected candidate will be responsible of development of computational tools within an on-going Finite Element framework, in which the PI and collaborators have worked during the last years. Support activities of the research group.

Required skills:

- Master on Computational Modelling (or similar)
- Experience in the development/use finite element software.
- Writing and communication skills (oriented towards the production of scientific articles and presentations).
- Knowledge of Computational Software, such as, ABAQUS, ANSYS, KRATOS…

Other valued skills (not mandatory):

- A PhD in applied mathematics or engineering related to the fields of computational mechanics, computational mathematics, optimization or statistics.
- Computational Fluid Dynamics / Fluid Structure Interaction modelling
- Programming experience in scientific computing (Python,..)

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 (minimum required 75%):

- Academic qualifications/track Records: 20%

Centre Internacional de Mètodes Numèrics a l'Enginyeria ® Q5850006G

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- Training and development: 5%
- Professional experience: 20%
- Knowledge of the Catalan language: 5%
- Knowledge of the English language: 10%
- Selective tests and interview: 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 18th June 2024, 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.