Centre Internacional de Mètodes Numèrics a l'Enginyeria ® Q5850006G

ANNOUNCEMENT FOR PROVISION OF THE WORKPLACE

VAC-2021-56 – Static and dynamic stiffness analysis for automotive pre-design

Number of vacancies: 1

Category: Research Engineer (RENG 5)

Location: CIMNE Barcelona

Yearly salary (gross): 21.277,10 €

Working hours: 40 hours/weekly

Contract type: Temporary

Duration: 6 months

Functions to be developed:

This contract will be done within the framework of the ProTechTion project (GA 764636), funded by European Commission.

The research objectives of the position pertain to the development of a priori reduced-order models as a solution of parametric problems in structural mechanics, with application to NVH assessment. More precisely, to obtain the lower eigenmodes and eigenfrequencies of the parametrized body-in-white structure of a vehicle. The tasks associated with the position include developing new algorithms, implementing them, validating the model, verifying the implementation and test the proposed models with benchmark problems of industrial interest.

Obligations of candidates

- Be highly committed with quality research.
- Participate on the dissemination and outreach activities
- Attend international conferences and present the research undertaken
- Contribute to the writing of articles in high impact international journals

Required skills:

A Consortium of   UNIVERSITAT POLITÈCNICA DE CATALUNYA BARCELONATECH   Generalitat de Catalunya   In cooperation with   UNESCO

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Numerical Methods in Engineering**

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Prerequisites

- To have a strong undergraduate and MSc degree (or equivalent) in Engineering, Mathematics, Physics or a related field and a good level of English

- To have an enthusiastic attitude to conduct research, being a hard-worker and critic person.

- To demonstrate knowledge of programming languages, in particular Matlab and Python.

- To have experience with Finite Element analysis for structural dynamics in NASTRAN.

- To have previous experience in the use and programming of reduced order models for structural dynamics.

Eligibility. Applicants shall, at the time of recruitment by CIMNE have not been awarded a doctoral degree.

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: 20%

- Previous research and academic experience in the field of the position: 50%

- Programming skills: 20%

- Language skills: 5%

- Communication/Teaching skills: 5%

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 July 29th, 2021 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.