CIMNE
EXCELENCIA SEVERO OCHOA
International Centre for Numerical Methods in Engineering
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ANNOUNCEMENT FOR PROVISION OF THE WORKPLACE

VAC-2022-90 – Post-Doc on Group on "Machine Learning in Civil Engineering"

Number of places: 1

Category: Assistant Research Professor

Workplace: Madrid

Salary (gross): 38.884,97

Weekly working hours: 40

Functions to be developed:

1. Plan and conduct high quality research under the supervision of the PI of the "Machine Learning in Civil Engineering" research group.
2. Collaborate with various research groups across Europe and elsewhere
3. Document and disseminate the research results within CIMNE and externally
4. Publish in high impact journals
5. Participate in research projects and contracts with industry of interest to the RTD Group
6. Collaborate in the preparation of competitive RTD research proposals
7. Development of discrete element method codes for the simulation of granular matter.
8. Application of CFD codes to solve hydraulic engineering problems.

Required skills:

- Master or PhD degree in mechanical/civil/engineering
- Knowledge of Machine Learning libraries and ability to program and train ML algorithms
- Ability of writing scientific papers/reports
- Advanced C++ and Python programming skills.
- Good knowledge of English, both written and spoken.
- Good publication record

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Other valued skills (not mandatory):

- Expertise in the finite element method (FEM).
- Expertise in the discrete element method (DEM).
- Experience in the numerical analysis of multi-physics problems.
- R programming skills

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: 30%
- Previous research experience in the field of the position: 30%
- Programming skills: 20%
- Language skills: 10%
- Communication/Teaching skills: 10%

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 January 10th, 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.