Postdoctoral

Ecole/Institution/Société:
FAPESP - Sao Paulo Research Foundation, **Brazil / Sao Paulo**

Discipline:
Engineering Education

Type d'emploi::
Full-time

Date de publication:
2025-02-23

Personne à contacter:
If you wish to apply for this position, please specify that you saw it on AKATECH.tech

Post-Doctoral Fellowship in Engineering / Computing / Mathematics

Job Information

Organisation/Company

FAPESP - São Paulo Research Foundation

Research Field

Engineering

Researcher Profile

Established Researcher (R3)

Country

Brazil

Application Deadline

10 Mar 2025 - 23:59 (UTC)

Type of Contract

To be defined

Job Status

Not Applicable

Is the job funded through the EU Research Framework Programme?

Not funded by a EU programme

Is the Job related to staff position within a Research Infrastructure?

No

Offer Description

The candidate will collaborate with researchers from the project AVENIR promoted by Total Energies at the Research Centre for Greenhouse Gas Innovation (RCGI), an Engineering Research Center (ERC) set jointly by the São Paulo Research Foundation (FAPESP) and Shell, and hosted by the University of São Paulo's Engineering School (POLI-USP). Summary of the program and projects can be found at the RCGI website .

The objective of the project AVENIR – Anisotropic ViscoElastic Seismic Imaging – is to build highly efficient, domain-specific language software tools to perform full waveform inversion (FWI) based on three-dimensional, tilted transverse isotropic (TTI) viscoelastic wave modeling.

The applicant will be based at the School of Civil Engineering, Architecture and Urban Design (FECFAU) of the State University of Campinas (UNICAMP) in São Paulo state, Brazil, and shall contribute to the following main objectives of the project:

1. Development of mesh generation and adaptation algorithms to produce optimized spatial discretization for finite element-based anisotropic elastic and viscoelastic wave propagation;

2. Develop interface matching strategies to allow the coupling with acoustic solvers (and consequently save computing time in the propagation through the water layer).

This project is suitable for a highly motivated candidate and requires programming skills and knowledge on numerical methods. The candidate must have a PhD degree in engineering, computing, mathematics, physics, or geophysics. Knowledge of English is required. Experience in the development of large-scale numerical methods and high-performance computing is highly desired.

This call offers one grant for this project. This post-doctorate fellowship is funded by FUSP, the USP Support Foundation. The fellowship will cover a standard maintenance stipend of BRL 12.000,00 per month.

Information and registration visit: https://sites.usp.br/rcgi/opportunities/ and access the vacancy code (REF 25PDR314).

More information about the fellowship is at: fapesp.br/oportunidades/7857 .

Where to apply

Website

http://www.fapesp.br/oportunidades/7857

Requirements

Additional Information

Eligibility criteria

Eligible destination country/ies for fellows:

Brazil

Eligibility of fellows: country/ies of residence:

All

Eligibility of fellows: nationality/ies:

All

Work Location(s)

Number of offers available

1

Company/Institute

Faculdade de Engenharia Civil, Arquitetura e Urbanismo, Universidade Estadual de Campinas (FECFAU-Unicamp)

Country

Brazil

State/Province

São Paulo

City

Campinas

Postal Code

13083-841

Street

Laboratório de Mecânica Computacional (LabMec) – Rua Josiah Willard Gibbs, Cidade Universitária

Contact

State/Province

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