

CALL FOR APPLICATIONS: RESEARCHER

Job/position/grant:

Job reference:	AE2025-0538 (CDMS - HASLAB) INESC TEC - Instituto de Engenharia de Sistemas e Computadores, Tecnologia e Ciência
Job/position/grant:	RESEARCHER
City:	Braga
Research field:	Main: COMPUTER SCIENCE Sub: Informatics

Job summary:

INESC TEC is accepting applications for 1 RESEARCHER job in the Computer Science

Project:	Claim Denial Management Solution
Scientific Advisor:	Ricardo Gonçalves Macedo
Duration of the contract:	from 2026-01-01 to 2026-12-31, eventually renewable.
Location:	Braga

Job description:

Work Area: Computer Science

Project overview: The work plan addresses the needs in current Research and Development (R&D) projects in INESC TEC to build energy-efficient software prototypes for training deep learning models on large-scale infrastructures (in particular, HPC centers). The specific objectives are detailed in the objectives section.

Objectives: (a) Identification of software requirements;
(b) Design, specification, and development of software prototypes for deep learning model training, focusing on reducing energy consumption without degrading training performance;
(c) Daily operation in advanced computing environments, including the creation, management, and deployment of software images using containers, as well as job execution scripts and result collection;
(d) Design, specification, and development of benchmarking software systems for evaluating the performance and energy consumption of the developed software prototypes;
(e) Test and integration of software components with systems from external partners;
(f) writing and management of documentation for the software components; (g) participation and representation of the developments in physical or remote meetings with project partners.

Academic Qualifications:	MSc in Informatics Engineering, Computer Science or alike.
Minimum profile required:	a) Knowledge and experience in the development of tools for energy consumption management. b) Knowledge and experience in the use of advanced computing services. c) Knowledge and experience with tools for training deep learning models. d) Knowledge and experience with the following virtualization/orchestration tools: Ansible, Singularity. e) Knowledge and experience with Linux systems. f) Language skills (written and spoken) for Portuguese and English.
Preference factors:	g) Knowledge and experience with the deep learning frameworks PyTorch, DeepSpeed, and TensorFlow. h) Knowledge and experience with the tools nvidia-smi and RAPL. i) Proven experience in the design and implementation of benchmarking systems for assessing the energy consumption of applications.

Funding Entity:	project CDMS, with reference 17409 (COMPETE2030-FEDER-01193000) Co-funded by ERDF - European Regional Development Fund through the Innovation and Digital Transition Thematic Programme (COMPETE 2030) within the scope of Portugal 2030.
Type of contract:	fixed-term contract
The hiring shall be governed by what is stipulated in the legislation in force regarding fixed-term employment contracts and by INESC TEC norms.	

Selection criteria:	The selection of the candidates will be based on the following criteria, in descending order of consideration: a) Relevant Curriculum in the concerned field of this tender b) Proven experience.
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Disability Incentive:	Candidates who present a degree of disability equal to or greater than 90% will benefit from an incentive (20) in the score of the CV Assessment. Candidates who present a degree of disability equal to or greater than 60% and less than 90% will also benefit from an incentive (10) in the score of the CV Assessment. Said score may, in these cases, exceed 100 points. Candidates must demonstrate the degree of disability during the application, namely through the submission of the Multi-Purpose Medical Certificate of Disability, issued in accordance with Decree-Law no. 202/96, of October 23 - currently in effect. Candidates must declare, in the application form, the type of disability used throughout the selection process, in order to proceed with the required adaptations.
Selection Jury:	President of the Jury: Ricardo Gonçalves Macedo; Member: João Tiago Paulo; Member: Cláudia Vanessa Brito; Substitute member: Tânia Esteves;
Notification of results:	The results of the selection process will be sent to the interested by electronic mail.
Application period:	From 2025-11-20 to 2025-12-04
Application submission:	Electronic form filling in www.inesctec.pt in the section Work with Us