

## **CALL FOR APPLICATIONS: RESEARCHER**

Job/position/grant:

Job reference: AE2020-0206 ( PEPCC - CTM )

INESC TEC - Instituto de Engenharia de Sistemas e Computadores, Tecnologia e Ciência

Job/position/grant:

City: Porto

Research field: Main: ENGINEERING

Sub: Electrical engineering

Job summary:

INESC TEC is accepting applications for 1 job in the Informatics Engineering area.

**Project:** Power efficiency and performance for embedded and HPC systems with custom CGRAs

Scientific Advisor: João Paiva Cardoso

**Duration of the** from 2021-01-01 to 2021-12-31

contract:

Location: INESC TEC, Porto, Portugal

Job description:

Work Area: Informatics Engineering

**Project overview:** - to contribute for the generation of efficient hardware accelerators implemented in FPGAs from streams of CPU instructions. - to contribute with techniques to improve the generation of hardware previously proposed by members of the project, namely with respect to dependence analysis, identification of memory regions without overlapping, and the techniques to extract data-streaming computations.

**Objectives:** Research and development of techniques to generate automatically hardware accelerators implemented in FPGAs from streams of CPU instructions obtained from program executions.

Academic Qualifications: Licenciado (BSc) and Master in Informatics Engineering or in related areas

**Minimum profile required:** Average score of the Licenciatura (BSc) and Master greater than 14 points

**Preference factors:** - Experience in implementing techniques for code analysis, in compiler engineering tasks, knowledge and use

of high-level synthesis tools, and FPGAs and hardware accelerators. - Master's Dissertation in the area of

compilers and mainly in code optimizations for high-level synthesis for FPGAs;

Funding Entity: Financed with national funds by FCT - Portuguese Foundation for Science and Technology, I.P., in the scope of

the project PTDC/EEI-HAC/30848/2017

Type of contract: Certain Term

The hiring shall be governed by what is stipulated in the legislation in force regarding fixed individual 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.

Selection Jury: President of the Jury: Prof. João Canas Ferreira;

Member: Prof. João Paiva Cardoso; Member: Prof. José Carlos Alves;

Notification of results: The results of the selection process will be sent to the interested by electronic mail.

**Application period:** From 2020-11-16 to 2020-11-30

Application submission: Electronic form filling in www.inesctec.pt in the section Work with Us



