

## **DEPARTMENT OF INFORMATICS**

RESEARCH SCHOLARSHIP FOR MASTER - 1 VACANCY

June 26th of 2023

A call for tenders is open for 1 Scholarship for Master Degree within the scope of the project AiBERTa: pretrAined BERT language model for european portuguese based on Arquivo.pt, with reference 2022.03882.PTDC, financed by national funds through FCT/MCTES, under the following conditions:

## Scientific area: Informatics

## Admission requirements:

Master in Informatics Engineering (or related field). Experience in Machine Learning and Natural Language Processing are preferred factors.

As set forth FCT Research Scholarship Regulation No. 950/2019 of December 16, 2019, article 3 and 6, candidates for "**BI**" (Research Grants) must comply as a rule condition for the award of the scholarship, the effective inclusion in study cycles leading to the attribution of academic degrees or in courses not leading to an academic degree. Courses that do not confer an academic degree correspond to the courses provided for in subparagraph e) of paragraph 3 of article 4 of Decree-Law No. 74/2006 of 24 March and must be developed in a higher education institution in association with at least one R&D unit, including a course plan in one or several research areas of the unit.

**Work plan**: The main objective to achieve is the creation of a language model for European Portuguese and the application of this model to the Named Entity Recognition (NER) task. To this end, this work will have as its initial task the state of the art related to BERT-based Language Models in order to, based on these architectures, develop a model for European Portuguese. Then, in order to evaluate the proposed model, implement a NER system as a fine-tune of the proposed model or using "feature-based embeddings".

**Applicable legislation and regulations**: The granting of the Research Scholarship will be carried out upon the signing of a contract between the University of Évora and the scholarship holder, as set in the template <u>former.fct.pt/apoios/Minuta\_Contrato\_Bolsa.docx</u>,, pursuant to the Research Scholarship Statute (Law No. 40/2004 of August 18 and Decree-Law No. 123/2019 of August 28) and in accordance with the legislation and Regulation of Research Grants of the Foundation for Science and Technology, IP in force, regulation nº950/2019 of December 16, 2019: <u>https://files.dre.pt/2s/2019/12/241000000/0009100105.pdf</u> and other applicable rules.



**Place of work**: The work will be developed at the Informatics Department of the University of Évora, under the scientific guidance of Professor Vítor Beires Nogueira.

**Duration of the scholarship(s):** The scholarship will have a duration of 12 months, starting in August 2023. The scholarship contract may be renewed up to the end of the budget allocation for the funding project.

Amount of monthly maintenance allowance: The amount of the scholarship corresponds to €1199.64, according to the table of scholarships awarded directly by FCT, I.P. in Portugal (https://www.fct.pt/wp-content/uploads/2023/02/Tabela-de-Valores-SMM\_2023.pdf), payments being made monthly, by check or bank transfer.

**Selection methods**: The selection methods to be used will be the following: curriculum evaluation and interview, with a valuation of 60% (sixty percent) and 40% (forty percent), respectively.

## **Composition of the Selection Jury:**

President: Professor Vitor Beires Nogueira 1st Member: Professor Paulo Quaresma 2nd Member: Professor Daniela Schmidt 1st Alternate: Professor Teresa Gonçalves 2nd Alternate: Professor Pedro Salgueiro

**Advertising/notification of results:** the final results of the evaluation will be published, through an alphabetically ordered list, by the final grade obtained, posted in a visible and public place of the Department of Informatics, and the approved candidate will be notified by email.

To ensure the right of prior hearing of interested parties, the Final Classification project will be announced by any written means to all interested parties.

After communicating the provisional list of the results of the evaluation, candidates have a period of 10 working days to express their opinion in a preliminary hearing of interested parties.

**Application deadline and submission of applications**: The tender is open from <u>27th of June of</u> <u>2023 to 12th of July of 2023</u> and the results of the selection will be published by <u>17th of July of</u> <u>2023</u>.

Applications must be formalized, obligatorily, by sending an application letter with the following documents:

- Curriculum vitae
- qualification certificate
- other documents considered relevant (optionally).

For the purposes of application, the evidence may be replaced by a declaration of honor signed by the candidate, but the failure to demonstrate that evidence, in the contracting phase, possession of the required degree on the deadline for application or the non-presentation of



proof of enrollment in the study cycle or non-degree course, for scholarships with this component, imply the cancellation of the candidate's application.

Academic degrees obtained in foreign countries require registration by a Portuguese Institution in accordance with Decree-Law no. 66/2018, of August 16 and Ordinance No. 33/2019, of January 25th.

The presentation of the certificate is mandatory for the signing of the contract. More information can be obtained at: <u>https://www.dges.gov.pt/pt/pagina/recognition?plid=374</u>

Applications must be sent by email to:

Prof. Vitor Beires Nogueira Department of Informatics of the University of Évora email: <u>vbn@uevora.pt</u>

