

## **CALL FOR APPLICATIONS**

Job:

Job reference: AE2019-0292 (Smart4RES - CPES)

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

Position: Research Grants (BI)

City: Porto

Research field: Main: ENGINEERING

Sub: Electrical engineering

Job summary:

INESC TEC is accepting applications to award 1 Research Grant for MSC .

Project: Next Generation Modelling and Forecasting of Variable Renewable Generation for Large-scale Integration in Energy

Systems and Markets

Scientific Advisor: Ricardo Jorge Bessa

**Duration Grant:** from 2020-04-01 to 2021-03-31 (12) eventually renewable until the project conclusion or budget.

Location: INESC TEC, Porto, Portugal

Job description:

Work Area: Data-driven predictive management of electrical grids

**Project overview:** Smart4RES will propose a holistic approach, that covers the whole model and value chain related to RES forecasting from weather forecasting up to end-use applications. To achieve this vision, The Grant Holder will develop data-driven solutions for use cases related to predictive and real-time operation of electrical grids, involving the modelling and integration of RES forecast uncertainty.

**Objectives:** Development of data-driven algorithms for predictive optimization. Specifically, the following objectives should be accomplished: Conceptualize, develop and implement innovative computational intelligence algorithms Publish papers in international conferences and journals Promote the transition to a distributed intelligence paradigm

Academic Qualifications: Master degree in Electrical Engineering or similar

Minimum Profile required: Advance knowledge in power systems

Experience in the application of artificial intelligence techniques to the electrical sector

Fluent in English (spoken and written)

**Preference factors:** Advance programming skills in Python Experience with deep learning techniques

Monthly Grant: €989,70 (MSC) according to the Stipends values of the grants awarded directly by the FCT, paid by bank

transfer. The grant holder may also benefit from additional incomes in the sequence of a quarterly evaluation process (Clauses 12 and 13 of INESC TEC Grants Regulation and Annex II), up to a maximum of 50% of the

monthly grant.

**Project duration:** 2019-11-01 a 2023-04-30

Funding Entity: CE

The grant contract shall be submitted to the legislation concerning the Research Grant Holder Statute, approved by Law n 40/2004, dated 18 August, amended and republished by Decree-Law No. 202/2012 of 27 August and amended by Decree-Law No. 233/2012 of 29 October and by Law No. 12/2013, of January 29, and Decree-Law No. 89/2013 of July 9 as well as by INESC TEC Grant Regulation, approved by FCT - Fundação para a Ciência e a Tecnologia (Science and Technology Foundation) in 12 January 2011 and FCT current Grant Regulation.

Additional information about INESC TEC Grants Regulation and relating annexes may be found at www.inesctec.pt/grants

**Selection Criteria:** Curriculum evaluation based on the criteria referred to in Clause 7 INESC TEC Grants Regulation and will include individual interviews in the final stage of the selection process, with its valuation: 90% curriculum evaluation (40% CV, 30% scientific domains and 20% Expertise) and 10% interview.

**Selection Jury:** President of the Jury: Prof. Ricardo Jorge Bessa;

Member: Prof. Bernardo Silva; Member: Prof. Clara Sofia Gouveia;

Notification of results: The results of the selection process will be disseminated to interested parties by mail, as referred to in Clause

8 of INESC TEC Grants Regulation.

**Application period:** From 2019-11-18 to 2019-11-29

Application submission: Fill in the electronic form in the section Work with Us at www.inesctec.pt, , attaching the Curriculum Vitae,

certificate of qualifications and other supporting documents relevant to the final assessment.