

(BL145/2026-IST-ID)

Scientific Initiation Studentships

Applications are open for 1 Scientific Initiation Studentship, within the framework of project AHEAD (AI-Informed Holistic Evs Integration Approaches For Distribution Grids), co-financed by the European Commission (GA 101160665), under the following conditions:

Scientific Area: Electrical and Computer Engineering

Admission Requirements: *To be enrolled at a professional higher technical course, at a bachelor degree, at an integrated master or master degree, or to have a bachelor degree and be enrolled at a course that does not award an academic degree and it is integrated in the educational project of a higher education institution, performed in association or cooperation with one or several R&D units;*

The candidate must also:

- a) *Have very good English written and oral skills.*
- b) *Have knowledge of data science methods.*
- c) *Have very good analytical skills.*
- d) *Have very good programming skills in programming languages such as Python.*
- e) *Have previous research experience, particularly in the energy domain.*

Workplan: The AHEAD project will create a simulation environment capable of predicting the most convenient location to place the electric vehicle (EV) charging stations and optimize both the usage of the power grid resources, and the charging stations. This simulation environment will exploit the unique features of currently available AI models and include two layers: the spatial mapping one (placing the chargers where the people need them to be), and the power grid one (placing the chargers where the grid can host them).

Flexibility services will be designed and tested in the model, to minimize the impact of EV charging pools on the network, and ensure the consumers have economic benefits. Moreover, these smart charging algorithms will be tested in six demonstration sites, dedicated to assessing the technical and economic feasibility of smart charging light and heavy-duty EVs, and boats.

The selected candidate will be working on tasks related to the activities to be developed in Portugal:

- a) Development of data-driven methodologies to identify and mitigate abusive charging of EVs in public charging infrastructures
- b) Integration of the developed algorithms in the project's backend and frontend systems;
- c) Assist the research team in producing reports and scientific presentations/publications.

Legislation and Regulations: Statute of Scientific Research Fellow, approved by Law nr. 40/2004, of August 18, as worded by Decree-Law nr. 123/2019, of August 28; IST-ID Regulation of Scientific Research Fellowships, available on <https://ist-id.pt/recursos/documentos/recursos-humanos/bolseiros/#1690453819726-6707f7f2-ce04>

Workplace: The work will be developed at the Interactive Technologies Institute / LARSyS, under the scientific supervision of Dr. Lucas Pereira. The activities will be developed in the city of Funchal, where the demonstration activities will be conducted.

Duration: The research fellowship(s) will have the duration of 3 months. It's expected to begin on the 10/2026. The fellowship is renewable for an additional 3 months, based on the quality of the research outputs and budget availability.

Monthly maintenance allowance: the amount of the monthly maintenance allowance is € 701.12, being the payment method by Wire Transfer.

Selection methods: The selection methods will be the following:

- a) Curriculum Vitae evaluation (70%)
- b) Motivation Letter (30%)
- c) Individual Interview (as a tie-break procedure, to be conducted online), to be conducted online

Composition of the selection Jury: Dr. Lucas Pereira (President), Prof. Hugo Morais, Prof. Augusto Esteves

Announcement/ notification of the results: The final evaluation results will be communicated to all applicants by email.

Application deadline and formalization: The call is open from September 23 until October 7, 2026.

It is mandatory to formalize applications with the submission of the following documents:

B1 Form – Fellowship application (<https://ist-id.pt/recursos-humanos/bolseiros/#documentos-relacionados>);

- i) *Curriculum Vitae*;
- ii) Academic degree certificate, where applicable;
- iii) Proof of enrollment at an academic degree course or at a course that does not award an academic degree;
- iv) Motivation letter;
- v) Declaration on honour that the applicant does not exceed with this contract, including the possible renovations, an accumulated period of one year in this type of studentship, continuously or with interruptions, and has not held any other fellowship directly or indirectly funded by FCT.
- vi) Applications must be submitted to the email: luisa.metelo.seixas@tecnico.ulisboa.pt (cc: alexandra.reis@tecnico.ulisboa.pt , lucas.pereira@tecnico.ulisboa.pt) with the subject [AHEAD]: Application to BIC-3
- vii) For additional information, please contact Lucas Pereira: lucas.pereira@tecnico.ulisboa.pt with the subject [AHEAD]: Inquire on BIC-3