

Scientific Initiation Studentships

Applications are open for 1 Scientific Initiation Studentships, within the framework of project SENCY (Sustainable ENergy transitions in the Catering industrY), (17115-LISBOA2030-FEDER-00850400), financed by national funds through FCT/MCTES (PIDDAC) and co-financed by the European Regional Development Fund (FEDER) through COMPETE – “Programa Operacional Fatores de Competitividade (POFC)”, under the following conditions:

Scientific Area: Electrical and Computer Engineering

Admission Requirements:

- a) *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;*
- b) *not to exceed with this contract, including the possible renovations, an accumulated period of one year in this type of studentship, continuously or with interruptions;*
- c) *not to have held any other fellowship directly or indirectly funded by FCT.*

The candidate must also:

- a) *Have very good English written and oral skills.*
- b) *Have very good knowledge of server configuration, including virtual machines and containerized systems*
- c) *Have very good programming skills in programming languages such as Python, JavaScript.*
- d) *Have previous research experience, particularly in the energy domain, will be highly appreciated*

Workplan: SENCY is a research and innovation project aiming to transform industrial kitchens into more sustainable, efficient, and energy-integrated environments. By leveraging real data collected from multiple Portuguese restaurants, the project develops advanced forecasting models and digital tools, such as digital twins, to monitor and optimize energy and water consumption.

The selected candidate will be working in tasks related to data collection. More precisely:

- Research and development of containerized cloud-based systems to support data loading and management from water and energy sensors;
- Development of algorithms to improve data collection pipelines from water and energy sensors;
- Analysis of water and energy datasets using AI techniques, including local LLMs to derive human-readable insights from the data;
- Assist in the writing of technical reports.

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; FCT Regulation for Research Studentships and Fellowships,



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available on <https://www.fct.pt/apoios/bolsas/docs/RegulamentoBolsasFCT2019.pdf> and <https://dre.pt/application/file/a/127230968>.

Workplace: The work will be developed at Interactive Technologies Institute / LARSyS, under the scientific supervision of Dr. Lucas Pereira

Duration: The research fellowship(s) will have the duration of 9 months. It's expected to begin on the 12/2025. The fellowship is non-renewable.

Monthly maintenance allowance: According to the values for Research Fellowships awarded by FCT in Portugal (<https://www.fct.pt/fct-atualizou-o-valor-das-bolsas-para-2025/>), the amount of the monthly maintenance allowance is € 651,12, being the payment method an option of the Fellow by Wire Transfer/Check.

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

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.

Deadlines and procedures of complaint and appeal. A complaint may be lodged from the final decision within 15 working days, or an appeal to the Executive Board of IST-ID within 30 working days, both counted from the respective notification

Application deadline and formalization: The call is open from October 29 until November 11, 2025.

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) *Motivation letter*;
- iii) Academic degree certificate, where applicable;
- iv) proof of enrollment at an academic degree course or at a course that does not award an academic degree;
- 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.

Applications must be submitted to the email: susana.nobrega@tecnico.ulisboa.pt (cc: lucas.pereira@tecnico.ulisboa.pt) with the subject [SENCY] Application to BII-1

For additional information, please contact Lucas Pereira: lucas.pereira@tecnico.ulisboa.pt with the subject [SENCY] Inquire on BII-1



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