

(BL243/2024-IST-ID)

## Post-Doctoral Research Fellowships

Applications are open for 1 Post-Doctoral Research Fellowship, within the framework of the PRR project eGameLab n26 CC931101, financed by IAPMEI.

**Scientific Area:** Computer Graphics & Multimedia

### Admission Requirements:

- a) *to hold a PhD degree obtained in the 3 years previously to the submission of the fellowship application;*
- b) *to have carried out the research work that led to the PhD degree in a different entity from the host institution of the fellowship;*
- c) *Not to exceed, with this fellowship contract, including the possible renovations, an accumulated period of 3 years in this type of fellowship, continuously or with interruptions;*
- d) *Not to have previously held a post-doctoral fellowship from IST-ID.*

**Workplan:** The selected candidate will engage in research activities that include: (i) the design, prototyping, development, and testing of mobile Augmented Reality lenses (magic mirror) for fitness and performative artists; (ii) conducting motion capture sessions using eXtended reality devices and biosignal sensors; and (iii) refine and optimize a collision detection library designed for biomechanical simulations. The primary goals of this project are building several low-fidelity prototypes and implementing a functional high-fidelity AR magic mirror prototype, perform motion capture, conduct user studies next to users and performative artists, refine an existent collision detection library, and assist all reporting activities (e.g., user manuals, paper writing, public presentations).

**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 for Research Studentships and Fellowships, available on <https://ist-id.pt/concursos/bolsas/>.

**Workplace:** The work will be developed at the Lab of xReality of Interactive Technologies Institute / LARSyS, under the scientific supervision of Prof. Daniel Simões Lopes and Dr. Filipa Correia.

**Duration:** The research fellowship(s) will have a duration of 14 months. It's expected to begin in November 2024, and the contract is not renewable.

**Monthly maintenance allowance:** the amount of the monthly maintenance allowance is €1801, being the payment method an option of the Fellow by Wire Transfer/Check.

**Selection methods:** The selection methods will be the following: Curriculum vitae detailing academic achievements (peer-reviewed publications, conference presentations, research projects), technical skills (Unity, Python, Lens Studio, Virtual/Augmented Reality, User Centered Design, Motion Capture), and relevant experience in Biomechanics, Sports, Computer Science, Biomedical Engineering or a closely related field (75%), individual interview (25%).

**Composition of the selection Jury:** Prof. Daniel Simões Lopes; Prof. Hugo Miguel Aleixo Albuquerque Nicolau; Prof. Duarte Nuno Jardim Nunes.

**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 16 until October 29, 2024.

It is mandatory to formalize applications with the submission of the following documents: i) B1 Form – Fellowship application (<https://ist-id.pt/concursos/bolsas/>); ii) *Curriculum Vitae*; iii) academic degree certificate; iv) motivation letter; v) declaration on honour that the applicant does not exceed with this contract an accumulated period of three years in this type of fellowship, continuously or with interruptions, within the technological and scientific system, and that the research work that led to the PhD degree was carried out in a different entity from the host institution of the fellowship.

Applications must be submitted to the email: [daniel.s.lopes@tecnico.ulisboa.pt](mailto:daniel.s.lopes@tecnico.ulisboa.pt) & [susana.nobrega@tecnico.ulisboa.pt](mailto:susana.nobrega@tecnico.ulisboa.pt)