

CALL FOR AWARDING RESEARCH FELLOWSHIPS WITHIN PROJECT GRANTS AND R&D INSTITUTIONS

One Research Fellowship

One Research Fellowship (“Bolsa de Investigação em Regime Especial”) for MSc holders is open at the FCIências.ID – Associação para a Investigação e Desenvolvimento de Ciências, for the project/R&D institution “GAVIDAV – Gaia Added Value Data Visualisation Functionality” / Centre for Astrophysics and Gravitation (CENTRA), Contract 4000112822/14/NL/JD), financed by ESA, under the following conditions:

1. **Scientific Area:** Software Engineering
2. **Requirements for admission:**
 - a. Candidates should be holders of a MSc degree in Software Engineering or related areas
 - b. Experience in developing Java, JavaScript, Python and/or C++ code
 - c. Experience in collaborative development using Version Control Systems (git or svn), continuous integration, unit testing frameworks and design patterns.
 - d. Experience in development of web applications and graphical user interfaces.
 - e. Candidates should speak, read and write fluently in English and Portuguese.
3. **Factors preferred:**
 - a. **Strongly preferred:** Experience or interest in graphics programming. Experience or Interest in three-dimensional visualization software programming, WebGL.
 - b. **Constitute an advantage:** Interest in Astronomy. Familiarity with ECSS (European Cooperation for Space Standardization) Standards. Interest and experience in project management. A taste for producing highly aesthetic astronomical images.
4. **Work plan:** The successful candidate will work in an active multidisciplinary team composed by Astronomers, Physicists and Engineers. The position is a unique opportunity for working in the development of an interactive visualization framework for very large scientific archives of the European Space Agency and for other space projects. The goals are, depending on the profile of the candidate, to:
 - Participate in the development of a web application for interactive visualization and exploration of astronomical data.
 - Participate in the development of the software engine that computes visual levels of detail and serves detail on demand to the web front end and other visualization software.Follow-up work will expand the application of the framework to other domains requiring interactive visual analysis of large datasets.

Some short term traveling within Europe is expected.
5. **Legislation framework:** Statute of the Scientific Research Fellowship, in accordance with Law 40/2004, of 18 August, as amended and republished by Decree-Law No. 202/2012 of 27 August, and as 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 9 July; And also by the FCT, I.P. Fellowships Regulation, in force (<https://www.fct.pt/apoios/bolsas/docs/RegulamentoBolsasFCT.pdf>) and FCIências.ID Fellowship Regulation, as approved on 23rd February 2017.

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6. **Place of work:** The work will be developed at the CENTRA-SIM laboratories of the Faculty of Sciences of the University of Lisboa under the scientific guidance of Professor André Moitinho de Almeida.
7. **Fellowship duration:** This position is initially opened for 6 months and will begin in April 2018. The fellowship contract may be renewed to more 6 months, or eventually until the end date of the project, in accordance with the provisions of Regulation of Research Fellowships from the Foundation for Science and Technology, I.P.
8. **Monthly allowance:** The fellowship amounts to € 980 – 1350 depending on the Candidate's professional experience.
The fellowship holder will have a personal accident insurance and, if not covered by any social protection scheme can ensure the right to social security through adherence to the voluntary social insurance scheme, pursuant to Código dos Regimes Contributivos do Sistema Previdencial de Segurança Social.
The fellowship will be paid monthly by bank transfer.
9. **Selection method:** Candidates will be assessed by the quality of their CV (70%), *letter of motivation including a description of methodological expertise relevant to this application* (30 %) and possibly also an interview (50%, in which case the CV and letter weights would be halved to 35% and 15%, respectively) .
10. **Selection Committee:** André Moitinho de Almeida (President); Alberto Krone-Martins (member); Koraljka Muzic (member); Ana Mourão (substitute member); António Amorim Barbosa (substitute member)
11. **Publication/notification of results:** The final results of the evaluation will become public, through ordered list *final grade obtained* which will be posted at the entrance hall of the **FCiências.ID**, located at the Faculdade de Ciências da Universidade de Lisboa, C1 bldg – 3rd floor, Campo Grande, 1749-016 Lisboa, and the selected candidate will be notified by *e-mail*.
12. **Deadlines:** This call for applications is open from 23th March 2018 to 3rd April 2018.
13. **Application:** Applications may be sent via e-mail to andre@sim.ul.pt , by attaching the following documents:
 - a. Curriculum vitae certificates of academic degrees
 - b. letter of motivation including a description of methodological expertise relevant to this application.
 - c. Email contact of two people well acquainted with the work of the candidate should be provided.Applications should also be sent by mail to algol@sim.ul.pt