

Call for Applications – Post-Doctoral Fellowship

Postgraduate Program in Computer Science
Federal University of Espírito Santo, Brazil

The Postgraduate Program in Computer Science (PPGI) of the Federal University of Espírito Santo (UFES), located in Vitória – ES, Brazil, is currently offering 1 (one) position of Post-Doctoral Researcher under the National Post-Doctoral Program (PNPD – *Programa Nacional de Pós-Doutorado*) of Brazilian federal government agency CAPES.

The formal call is published in Portuguese, here: <http://www.informatica.ufes.br/pt-br/conteudo/edital-seleciona-candidatos-pos-doutorado-no-ppgi>. This document contains a summary of the most important information regarding the position, as well as a description of some of PPGI/UFES' research groups in which the post-doc fellow could work if selected.

General Information	
Scholarship	R\$ 4100.00 per month (~ US\$ 1050.00). ¹
Requirements	<ol style="list-style-type: none"> 1. Hold a PhD degree or an equivalent qualification;² 2. Have a CV available either using CNPq's Lattes Platform³ or using the template attached to CAPES's Ordinance 086/2013;⁴ 3. Not be retired or in equivalent situation; 4. Belong to one of the following categories: <ol style="list-style-type: none"> A. Brazilian or foreigner resident in Brazil with a temporary visa, with no current employment relationship; B. Foreigner resident abroad, with no current employment relationship; C. Professor or researcher with current employment relationship with a Brazilian higher education or public research institution.
Duration	Categories A and B above: 1 year, renewable to a maximum of 5 years. Category C above: 1 year, not renewable.
How to apply	Contact a member of PPGI/UFES you would like to be your supervisor and follow their direction. The candidate supervisor should follow the instructions of the formal call in Portuguese (see URL above).
Deadline	December 7, 2018
Contact	Prof. Vítor E. Silva Souza – Head of PPGI/UFES vitorsouza@inf.ufes.br

Research Opportunities

In the following pages, we present brief descriptions of research groups and members from PPGI/UFES (researchers) that could apply as candidate supervisors. We suggest you find a group/researcher with a

¹ Cost of living in Brazil is lower than developed countries (e.g., USA, Canada and European countries), if currency exchange rates are considered. See, e.g., https://www.numbeo.com/cost-of-living/country_result.jsp?country=Brazil

² PhD degrees recognized by the Brazilian Ministry of Education are accepted. Unvalidated foreign degrees will be analyzed by PPGI/UFES.

³ See https://www.cnpq.br/cvlattesweb/pkg_cv_estr.inicio

⁴ See http://www.capes.gov.br/images/stories/download/legislacao/Portaria_86_2013_Regulamento_PNPD.pdf, page 11

common research interest and contact them for further information on this research position.

About the city of Vitória – ES, Brazil

Vitória is the beautiful capital of the state Espírito Santo, it is an island located in the coast of the state. The population is around 350,000 inhabitants. The city nowadays has the 5th best human development index among all cities in Brazil. Vitória is an active city, but without the problems of the big cities, like high living cost, traffic jams, busy streets, etc. Since Vitória is an island, it has many beautiful beaches, and some of them are just at a walking distance from the University. Apart from the beaches, it has places for practicing sports, enjoying the nature, for getting together, and many other things. Brazilians are very warm and welcoming people, and we are sure you will have a great time in and out of the working place.

Watch this video: <https://www.youtube.com/watch?v=5CDpEKvcdhU>, for more scenes of Vitória.





Laboratório de Computação de Alto Desempenho (LCAD)

[<http://www.lcad.inf.ufes.br>]

About LCAD

The LCAD lab has the brain understanding as final goal of research. To achieve this goal, focus is given to the areas of computation intelligence in general, including sub areas like deep learning, and computer vision applied to real life problems. Currently, one of the main projects of the LCAD is the Intelligent Autonomous Robotic Automobile (IARA), please check the video <https://youtu.be/tg8tkciHGzc> to see IARA driving autonomously. The implementation of a self-driving car requires addressing various fundamental problems of robotics such as mapping, localization, navigation, including many other computer vision problems like pedestrian detection, traffic light state recognition, etc. Please check the investigated problems and proposed solutions of our group in <https://www.youtube.com/user/lcadufes>. Besides the autonomous car, LCAD also works in many other problems related to computation intelligence, such as facial expression recognition, fragmented document reconstruction, deep learning techniques, and others. Please check the publication list of the LCAD's researchers in their website to find out more about our research. We are looking forward to hearing from you.

The following table lists researchers from this group that are willing to supervise a post-doc fellow and research opportunities for this collaboration. We advise you to contact the researcher of your choice directly if you are interested in any of the respective research opportunities.

Research Opportunities & Potential Supervisors

<p>Alberto Ferreira De Souza http://www.inf.ufes.br/~alberto alberto@lcad.inf.ufes.br</p>	<ul style="list-style-type: none"> • Self-driving cars • Deep Learning • Machine Learning
<p>Claudine Santos Badue Gonçalves https://inf.ufes.br/~claudine/ claudine@lcad.inf.ufes.br</p>	<ul style="list-style-type: none"> • Self-driving cars • Machine Learning • Deep Learning
<p>Thiago Oliveira dos Santos http://www.inf.ufes.br/~todsantos/ todsantos@inf.ufes.br</p>	<ul style="list-style-type: none"> • Deep Learning • Computer Vision • Machine Learning



Ontology & Conceptual Modeling Research Group

[<https://nemo.inf.ufes.br>]

About NEMO

NEMO investigates the application of domain and foundational ontologies as well as ontology-based techniques in various aspects of conceptual modeling such as information modeling, enterprise modeling, agent-based systems and the Semantic Web. Two scientific contributions that are at the core of NEMO's research program are the foundational theory UFO (Unified Foundational Ontology) and the ontologically and cognitively well-founded conceptual modeling language OntoUML. These developments have influenced international standards (e.g., ISO SC7 Ontology Standards in Software Engineering, The Open Group's ArchiMate) as well as international responses to standardization RFPs (e.g., OMG's SIMF). NEMO is responsible for implementing a number of important computational tools for supporting Well-Founded Conceptual Modeling in OntoUML. Recently, the group has been exploring foundations for Multi-Level Conceptual Modelling with MLT and related technologies.

The following table lists researchers from this group that are willing to supervise a post-doc fellow and research opportunities for this collaboration. We advise you to contact the researcher directly if you are interested in any of the respective research opportunities.

Research Opportunities & Potential Supervisors

<p>João Paulo A. Almeida http://nemo.inf.ufes.br/jpalmeida jpalmeida@inf.ufes.br</p>	<ul style="list-style-type: none"> • Conceptual Modeling; • Enterprise Architecture; • Enterprise Modeling; • Multi-Level Modeling.
<p>Monalessa Perini Barcellos http://nemo.inf.ufes.br/monalessa monalessa@inf.ufes.br</p>	<ul style="list-style-type: none"> • Ontologies in Software Engineering; • Software Process and Quality.
<p>Ricardo de Almeida Falbo http://www.inf.ufes.br/~falbo/ falbo@inf.ufes.br</p>	<ul style="list-style-type: none"> • Ontologies in Software Engineering; • Ontological Engineering; • Software Process and Quality.
<p>Vítor E. Silva Souza http://www.inf.ufes.br/~vitorsouza/ vitorsouza@inf.ufes.br</p>	<ul style="list-style-type: none"> • Ontologies in Software Engineering; • Goal-Based Modeling & Requirements Engineering; • Semantic Web; • Web Engineering.

Giancarlo Guizzardi (<https://inf.ufes.br/~gguizzardi/>) and Renata Silva Souza Guizzardi (<https://inf.ufes.br/~rguizzardi/>) are also members of NEMO. However, as they are currently under leave of absence they do not qualify as potential supervisors. Nevertheless, a post-doc fellow working at NEMO will be able to collaborate with them frequently during research.