

<b>Lead institution: Escola Politécnica / USP</b>	
<b>Supervisor name: José Reinaldo Silva</b>	<b>Department: PMR</b>
<b>Recipient:</b> <a href="https://www.rcgi.poli.usp.br/opportunities-application/">https://www.rcgi.poli.usp.br/opportunities-application/</a>  <b>Ref: 21PDR130 – Post Doctoral</b>  <b>Deadline for submission: December 20<sup>th</sup>, 2021</b>	<b>Type: Posdoc</b> <b>Period: Full time</b> <b>Number of months: 36</b> <b>Intended beginning date: January, 2022</b>
<b>Project title: (Portuguese and English)</b>  Sistema de Serviço para Análise de Emissão de Gases de Efeito Estufa  Service System to the Analyses of Green Gases Emission	
<b>Research theme area: (Portuguese and English)</b>  Ciência e Engenharia de Serviço  Service Science and Engineering	
<b>Abstract (Portuguese and English)</b>  O candidato irá colaborar com os pesquisadores do projeto GHG-D1.1 do FAPESP-Shell Centro de Pesquisa para a Inovação de Gás da POLI-USP na Universidade de São Paulo. Resumo do programa e os projetos podem ser encontrados no site da RCGI ( <a href="http://www.rcgi.poli.USP.br/">http://www.rcgi.poli.USP.br/</a> ).  The candidate will collaborate with researchers from the project GHG-D1.1 of the FAPESP-Shell Research Centre for Gas Innovation of POLI-USP at the University of São Paulo. Summary of the program and projects can be found at the RCGI website ( <a href="http://www.rcgi.poli.usp.br/">http://www.rcgi.poli.usp.br/</a> ).	
<b>Description (Portuguese and English)</b>  O candidato contribuirá alinhado aos principais objetivos do projeto: 1. Montagem da infraestrutura de nuvem, definição de serviços e metadados, para aplicação dos métodos de Data Science e Inteligência Artificial 2. Design do sistema inteligente de informação de serviços e algoritmos para análise de dados baseados em processos. 3. Desenvolvimento de sistema inteligente de serviços e experimentos de pré-processamento para análise de GHG. 4. Implementação e teste do sistema de serviço  The applicant will contribute in line with the main objectives of the project: 1. Building of the cloud structure, definition of services and metadata to apply Data Science and Artificial Intelligence methods to GHG analysis 2. Design of the Intelligent Information Service with data process-based analysis algorithms 3. Development of intelligent test services to pre-process GHG analysis 4. Implementation of the service system	

**Requirements to fill the position. (Ex: specific experience, minimum or maximum years after concluding the course) (Portuguese and English)**

O projeto é adequado para um candidato com doutorado em Ciência da Computação, Engenharia de Computação Engenharia Elétrica, Mecatrônica ou Mecânica que tenha interesse e habilidades no uso da nuvem, sistemas de dados e preferencialmente sistemas Web definidos pela W3C. Recomendável também noções de Inteligência Artificial.

O escopo do trabalho de pós-doutorado irá explorar técnicas de Model-Based System Engineering e Service Science para conceber, modelar e implementar um Sistema de serviço na nuvem, baseado em técnicas de IA para prover recursos e dados para análise da emissão de gases de efeito estufa de pesquisadores com diferentes backgrounds e interesses. Deve, portanto, explorar técnicas de acoplamento com o usuário e *value co-creation*.

The available position is suitable for candidates with a doctoral degree in Computer Science, Computer Engineering, Electrical, Mechanical, or Mechatronics Engineer. It is expected that candidates have academic interest and skills using cloud services, data systems, and Web systems, as defined by W3C. It is also required knowledge about Artificial Intelligence.

The postdoc research will explore Model-Based Systems Engineering and Service Science to incept, model, and implement a Cloud Service System using AI approaches. The target service should find resources, processes, and data to support green gases emission analysis to serve researchers with different backgrounds and interests. Therefore, it will explore user coupling and the value co-creation approach.

**Funding Notes:** This Postdoc fellowship is funded by FUSP. The fellowship will cover a standard maintenance stipend of R\$ 7.373,10 per month.

**Work place:** RCGI – Research Center in Green Gas Innovation – USP - Brazil

**Documents/Information to be Sent:**

**Ref: 21PDR130**

- 1) Fill-in the application form: <https://www.rcgi.poli.usp.br/opportunities-application/>
- 2) **Send the following documents to [rcgi.opportunities@usp.br](mailto:rcgi.opportunities@usp.br)**
  - Updated CV including all your publications (with a link to the Lattes Curriculum, if applicable);
  - Number of publications, number of citation and H index (base Scopus and Google Scholar) - for Postdoctoral positions;
  - Date of PhD conclusion - for Postdoctoral positions;
  - A copy of the academic record/academic transcript of both graduate and undergraduate courses;
  - A motivation letter highlighting your background and research interests (in English) **to be filled in the application form**.

Deadline: **December 20<sup>th</sup>, 2021**

In case you have any question, please write to [rcgi.opportunities@usp.br](mailto:rcgi.opportunities@usp.br)