SOFTWARE ENGINEER / SYSTEMS ANALYST (Ref. 23SE241)

Software Engineer and Systems Analyst, to work on activities related to the development and support of research projects conducted at the Dynamics and Fluids Center (NDF) and the Research and Innovation Center for Greenhouse Gases (RCGI) of the Polytechnic School at the University of São Paulo, Butantã campus, São Paulo/SP.

ATTRIBUTIONS:

The Software Engineer and Systems Analyst will work in the field of information technology to contribute to the development and support of research projects conducted by professors, postdoctoral researchers, and graduate and undergraduate students. The scope of work will encompass three areas. The first is the development of software tools, specifically the construction of databases, implementation of algorithms, integration and automation of frameworks, creation and maintenance of containers, and testing and verification of the software developed within the group. The second area involves providing assistance and taking care of the maintenance of research infrastructure, both at the hardware and software levels. This includes the administration of user accounts on shared workstations, software installations and maintenance, network administration, equipment administration, repository administration, and website infrastructure administration. The third area is related to training activities and the development of manuals and tutorials to facilitate the use of the developed software and increase its reach in academic and technical communities.

SKILLS & REQUIREMENTS:

Mandatory: Advanced knowledge of Python, C++, OpenACC, CUDA, and Jupyter. Knowledge of systems and network administration, including security tools. Knowledge of LaTeX, WordPress, Microsoft Office, and Google tools (Email, Calendar, Drive, Meet, Forms). Familiarity with Windows and MacOS operating systems and advanced knowledge of Linux, especially CentOS and Ubuntu distributions.

Ability to communicate effectively in both Portuguese and English, in written and spoken formats. Willingness to learn new tools and skills, autonomy, and initiative to seek new knowledge and information. Ability to work in a team.

Desirable: Knowledge of machine learning and neural networks, using PyTorch or Tensorflow. Knowledge of CUDA and/or OpenACC. Knowledge of databases and big data tools such as SPARK.

Mandatory Qualifications:

- Completed or ongoing higher education.
- Availability for on-site work during business hours.
- Advanced or fluent English proficiency.

ADDITIONAL INFORMATION:

Place of Work: Dynamics and Fluids Center, Polytechnic School, University of São Paulo (Av. Prof. Mello Moraes, 2231), Butantã campus, São Paulo/SP.

Application at:

www.sites.usp.br/rcgi/opportunities/

REF: 23SE241

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