Software Scientists for climate change research (permanent position)

We seek an experienced software engineer/scientist to support our team of scientists in studying land biosphere responses to human impacts & monitoring greenhouse gas emissions and forest biomass through numerical models and observational data.

The BIOGEO team develops and deploys numerical models of the land surface valorizing ecological theory & observations from various sources. This includes process-models like land surface model ORCHIDEE, data-driven models, and increasingly hybrid models which valorize the rigour of process model with the computational efficiency of machine learning. We contribute to multiple research projects & global initiatives like global carbon project, carbonmonitor) and our works are regularly featured in news outlets. We offer meaningful work benefiting our planet & its inhabitants by means of open-access, rigorous, and transparent research output. Over the next 4 years, a focus will be the CALIPSO project led by our team which aims at leap forward in modelling carbon loss pathways in Earth System Models (from tropical dry-spells, over microbial evolution to permafrost thaw).

The work involves:

- work with researchers to build & maintain numerical models which are robust, resource-efficient, maintainable, extendable, usable, interpretable and sustainable
- supervision of software engineers and students in support of the team's projects
- contribute to publication of research output (e.g. article, software, database)
- attendance to workshop, trainings and conference
- A transition towards a science-focused position is possible depending on the candidate's interests.

Your profile:

- master degree or engineering diploma in computer science, numerical modelling, machine learning or any other relevant field. PhD is a plus but not a requirement
- strong background in programming (e.g. FORTRAN, python) & experience in high-computational infrastructure (e.g. parallelisation) & big data. Experience with land surface models is an asset.
- familiar leading and structuring software projects
- are curious, enjoy learning and a research environment
- good oral and written English skills (B2 level). French skills are an asset

Benefits:

- stimulating tasks in an open, friendly and multicultural team (English working language) which aims to make an impact for the planet
- excellent scientific infrastructure, international research networks, and computing environment
- training & support from Cambridge's Institute of Computing for Climate Science

- social benefits, remote working possibility (within France), and generous number of paid holidays/leave days (~50 days per year).

Location: Laboratoire des Sciences du Climat et de l'Environnement LSCE is a world-class research laboratory situated in Europe's largest, academic and private science hub (Paris-Saclay). The LSCE hosts approximately 350 researchers, engineers and administrative staff including many PhD and master's students. The LSCE offers a relaxed, diverse, highly international, and supportive environment with a 'light' degree of vertical hierarchy. LSCE strives to be a workplace free from discrimination and with equal opportunities for all. Free daily shuttle buses from Paris and surrounding areas.

Contract duration: permanent after probation period of 8 months

Starting date: The position is available from now and will remain open until filled.

Salary: full time employment incl. social and health benefits, commensurate with work experience ranging between 3000 and 4000 Euro/month net salary The LSCE is a joint research unit with different tutelary institutions and the employer here is the Université de Versailles Saint-Quentin-en-Yvelines (UVSQ).

Main supervisor: Daniel Goll. Scientific lead of the BIOGEO team

Deadline for application: open till filled

How to apply: Applicants should submit a complete application package by email to the contact below. The application package written in English should include (1) a curriculum vitae including e.g. important recent outputs (e.g. software, dataset, publications), (2) statement of motivation which address your fit for the position (3) examples of software you have developed (e.g. access to your github repository), (4) names, addresses, phone numbers, and email addresses of two references. Please name all files starting with NAME.FIRSTNAME_

Contact:
daniel.goll@lsce.ipsl.fr and philippe.ciais@lsce.ipsl.fr (**mind file size restriction 2Mb**)