

JOB OFFER – STUDY ENGINEER - CDD

AI-Specialist in Climate Simulations Data Processing

OFFER INFORMATION

Reference: GC-25-CP-01

Team: GLOBC

Location: 42 Avenue Gaspard Coriolis – 31057 Toulouse

Contact person: Pagé Christian

Period: 12 months - from: 03/11/2025

Salary: from 30 K€/year (gross) depending on qualifications and experience

Level of education required: Master or Engineering School

Key words: Climate, artificial intelligence, machine learning, engineer, data processing

CERFACS

Cerfacs is a private research, development, transfer and training center for modeling, simulation and high-performance computing. Cerfacs designs, develops and proposes innovative software methods and solutions to meet the needs of its partners in the aeronautics, space, climate, environment and energy sectors. Cerfacs trains students, researchers and engineers in simulation and high-performance computing.

Cerfacs works closely with its seven partners: [Airbus](#), [Cnes](#), [EDF](#), [Météo France](#), [Onera](#), [Safran](#) et [TotalEnergies](#).



HOSTING TEAM - GLOBC

The Cerfacs GlobC team is made up of senior and early-career researchers, and is supported by a team of highly qualified research engineers with extensive expertise in climate and environmental models, high-performance computing (HPC), simulation workflows and data management. We conduct cutting-edge research into climate variability and prediction, oceanography and polar science, air-sea interaction, detection and attribution of climate change and its impacts, extreme events, and environmental hazards. We use a wide range of numerical models, from large-scale simulation to global earth system models, and associated algorithms (data assimilation, uncertainty quantification, machine learning, code coupling) to meet our scientific challenges.

CONTEXT

This position is open within the framework of the IRISCC project, a project funded by the European Commission under the Horizon Europe program. The project started on 01/04/2024 and will end on 30/09/2028. It involves 78 European partners. IRISCC provides scientific and knowledge services to foster cutting-edge research and evidence-based policymaking to improve Europe's resilience to climate change. IRISCC ensures a "one-stop-shop" for various user communities around RI services related to climate risks by setting up a dedicated catalogue of services as well as an access management system, allowing the granting of transnational access (onsite and remote) and offering virtual access.

The contract duration includes a possibility of extension.

MISSION

- Determine the data needs for future climate simulations to support the demonstrators identified within the project framework.

- Get familiar with existing statistical downscaling tools using artificial intelligence methods, and evaluate the robustness of those methods.
- Develop data processing pipelines using existing datasets (CMIP6, CORDEX, CORDEX-Adjust), as well as adapting existing tools for extraction, calculation of climate indices and indicators (icclim), and statistical downscaling, to generate data required by the demonstrators.
- Implement the processing pipelines in an operational environment.
- Contribute to the writing of project deliverables.
- Participate in videoconferences, meetings, and development and coordination workshops at the European level.

DESIRED PROFILE

- Master or Engineering School
- Programming logic skills and basic knowledge of optimization
- Skills in artificial intelligence methods
- Proficiency with development management tools (git)
- Competence in using container technologies (Docker, Kubernetes)
- Organizational skills (responsiveness, high autonomy, and rigor)
- Proficiency with IT tools necessary for research and development work
- Proficiency with office tools needed to present and promote research and development work (LaTeX, Word, PowerPoint, internet tools)
- Proficiency in English
- Strong motivation

WHAT WE OFFER AT CERFACS

- Broad access to technology, a rich interpersonal environment, in-house skills recognized nationally and internationally.
- An inclusive and equitable work environment.
- A structure accessible to people with disabilities.
- A complementary health insurance scheme offering excellent health care coverage in addition to social security, with the possibility of enrolling family members (spouse and children).
- 6 weeks' annual leave (with the possibility of 22 extra days' leave per year linked to your choice of a 39-hour rather than 35-hour working week).
- Flexible working arrangements, with the possibility of working from home up to two days a week.
- A sustainable mobility package enabling employers to pay up to a maximum of 500 euros a year to cover the home-to-work travel costs of staff who cycle to work.

HOW TO APPLY ?

To apply, please send your CV and covering letter to christian.page@cerfacs.fr , applications are open until 31/10/2025.

See you soon at CERFACS!