

## Research Software Engineer - Brussels

### Welcome to Rayference

Rayference is a Brussels-based SME active in research and development for radiative transfer modelling, satellite data processing and advanced retrieval algorithm development based on inverse modelling. We provide expertise in remote sensing data radiometric calibration and apply new metrological concepts to satellite observations dedicated to climate and environment monitoring. We developed an advance method for the retrieval of Essential Climate Variables from satellite observation. We maintain and operate an open-source 3D radiative transfer model to support the Earth Observation scientific community involved in satellite data calibration and validation.

### Your role

We are hiring a **Research Software Engineer** to support our Earth Observation activities. You will develop and maintain scientific software to support contributing end-to-end to radiative transfer simulation workflows: 3D scene generation, spectroscopic data pre-processing, radiative transfer model operation and data post-processing. You will also support the maintenance of satellite image generation and exploitation products. You will be part of an international team where English is the working language and will have the opportunity to present the outcome of your work at European R&D project meetings.

### What you bring

- University degree in Computer Science, Engineer, Physics, Mathematics, or equivalent.
- 1 – 3 years of proven experience of programming in the Python scientific ecosystem (such as NumPy and xarray), modern C++ (C++20), and distributed computing (preferably Dask).
- Experience in modern development and testing technologies (git, GitLab, CI/CD, Dev Containers).
- Basic knowledge of the Linux environment.
- Experience in image processing, Earth Observation data processing (experience in formats such as NetCDF is an asset).
- Fluency in English (written and spoken).

### What makes you stand out

- Knowledge of relevant topics such as radiometry, computer graphics and remote sensing.
- Knowledge of GPU programming.
- Experience with container technology, especially Docker/Docker-Swarm.
- Experience with virtualization-based server operating systems.
- Ability to write accurate and consistent technical documentation.

- Excellent skills to fulfil the assigned tasks with great level of autonomy and sense of responsibility.
- Ability to plan your work and to cope with tight schedules and multiple tasks.
- Good sense of teamwork.
- Strong interest for scientific topics such as numerical computing.
- Strong motivation to contribute to the development of a young innovative company.

## What we offer

At Rayference, you will work with a small, young and international team, in a flexible professional environment. You will have the opportunity to make an impact in addressing important scientific and societal challenges linked to climate monitoring and Earth Observation. You will collaborate with passionate and talented colleagues with whom you will share regular team-bonding activities. We offer a competitive package and we value work-life balance, this is why we offer a flexible schedule and possibility to telework from abroad. We believe in a long-term vision, supporting our staff in developing their best skills and building a career in this field.

The salary for this role ranges from 3.600€ to 4.000€ gross monthly (50.112€ to 55.680€ annually), depending on experience and qualifications. We offer a range of benefits to support our employees' well-being, work-life balance, and financial security, such as transportation support, internet and phone connection and teleworking allowance.

## How to apply

Please send to **recruitment@rayference.eu**:

- A cover letter explaining your interest in the position, highlight relevant qualifications and achievements, and including links to examples of relevant prior works;
- a detailed CV;
- email address and affiliations of 2 references.

**Only applications sent to this email address will be considered.** All documents shall be provided in English. Any questions related to this position can be sent to the same email address. *Applications from women are encouraged.*