Internship in Flight Operations Division

Internship title: Integration of the Retrieval-Augmented Generation process in a Large Language Model for Sentinel-3 operational documentation.

EUMETSAT is exploring the possibility to use Large Language Models (LLMs) integrated with Retrieval-Augmented Generation (RAG) to assist and enhance the capabilities to look up, query the operational and technical documentation baseline via the creation of an AI "virtual assistant" for the spacecraft operations team.

Duties

The intern will first develop an understanding of the team's needs to balance efficient search and retrieval of large documentation sets with the

Finally, the intern will support the development of a virtual assistant by building on the work done by the EUMETSAT EDGA project and create a draft

need to keep EUMETSAT's data of document writing guidelines private and protected, and how applicable to future missions to these needs can be met. They ensure documentation sets are will also learn how to manipulate AI-readable.

the documentation in a format which can be used by the RAG technology.



LOCATION

Darmstadt, Germany



QUALIFICATIONS

The internships are open to bachelor and master students with mandatory internship requirements in relevant disciplines such as Computer science and spacecraft engineering.



LANGUAGES

The official languages of EUMETSAT are English and French. It is necessary to be able to work effectively in English.



Skills and Experience

- Have the ability to work effectively in English;
- Be computer literate;
- Be intrinsically motivated and curious about the internship subject;
- Be able to work independently and collaboratively;
- Have the ability to take the initiative in researching ideas;

• Have the ability to collect, collate, conceptualize and present information clearly.

Additional specific requirements:

- Proficiency in Python;
- Software development and architecture knowledge;
- Knowledge of Al/Machine Learning methods.

Employment Conditions

Length of internship: 3 months

Anticipated start date: Q3 2025 (latest possible start date 1 October 2025)

The internship will require a non-disclosure agreement and potentially a basic background check for the intern, due to the sensitivity of the provided information.

No salary is paid to interns who are still in studies, however a daily allowance and contribution to travel / accommodation costs may be provided.

As of 1 January 2025, interns may be granted a daily allowance of EUR 25 per day, relocation cost reimbursement of up to EUR 400, and accommodation cost reimbursement of up to EUR 1000 per month.

Interns are responsible for providing their own health and accident insurance and for finding their own accommodation in Darmstadt.

Consideration may also be given if the internship is not a mandatory part of curriculum, for a maximum duration of three months.

EUMETSAT is committed to providing an equal opportunities work environment for men and women.

Please note that only nationals of EUMETSAT Member States may apply. The EUMETSAT Convention requires that Staff shall be recruited on the basis of their qualifications, account being taken of the international character of EUMETSAT.

About EUMETSAT

EUMETSAT is Europe's meteorological satellite agency. Its role is to establish and operate meteorological satellites to monitor the weather and climate from space - 24 hours a day, 365 days a year. This information is supplied to the National Meteorological Services of the organisation's Member States in Europe, as well as other users worldwide.

EUMETSAT also operates several Copernicus missions on behalf of the European Union and provide data services to the Copernicus marine and atmospheric services and their users.

As an intergovernmental European Organisation, EUMETSAT has 30 Member States (Austria, Belgium, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, The Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.)