Call for contribution of expertise

CERN invites collaborating institutes and universities to contribute the expertise of their qualified employees to the activity described below.

**Start date:** ASAP  
**Duration:** Two years

**Project/Activity:** The new CERN Document Server platform based on InvenioRDM

**Detailed description of Activity:**

CERN Document Server (CDS) is the CERN Institutional Repository, acting as the main CERN documents hub. CDS is being used by the entire CERN, experiments and departments (more than 40'000 users), to store, preserve and disseminate their research publications, as well as videos, images, books, and reports. It currently contains more than 1 million records and 50 TB of data.

In order to provide a modern and user-friendly tool to our users’ community, we are working on the next generation of the web platform that will be also available as open source product and will be used by many other organisations.

We are very excited about this project here at CERN: not only you will have the opportunity to contribute to an open source project that will have a large impact and adoption in the digital repositories’ world, but you will also work with cutting-edge technologies in a very friendly environment to build and deliver an amazing product.

This new repository will be used by the entire CERN community, thus having a big impact on the day-to-day activities of the CERN users.

As part of the CDS team:

- you will be part of a highly dynamic and experienced team and you will be fully integrated in all development activities
- you will be facing challenges such as how to develop with scalability, performance and high customizability in mind and how to work efficiently in the team to improve our velocity.
- your main tasks will include development of backend and frontend modules but also devops. Main technologies are for backend Python 3, using Flask/Jinja web development framework and Celery for tasks, and for frontend HTML5/SemanticUI/React. Plus, SQLAlchemy/PostgreSQL for persistence, Elasticsearch for search, Redis for caching, RabbitMQ for messaging and Docker/OpenShift for deployment.
- you will be involved in the data migration from the old legacy system to the new platform.

**Profile:** Full Stack software engineer

**Specific details:** proven experience of web development with Python/Flask and open source software is a plus.

**Status at CERN:** Associated Member of the Personnel (Project Associate).
Conditions in accordance with CERN’s Staff Rules and Regulations and Administrative Circular No. 11. Subsistence allowance is payable by CERN to cover the additional cost arising from the individual’s (and, as applicable, their family’s) stay in the local area while performing activities at CERN.

Option: Collaborating institutes and universities can propose to support the activity of the qualified employees participating in this “Call for contribution of expertise” with students or other employees. Their status and Subsistence allowance when applicable will be adapted to their relation with their institutions.

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Reference: 2019_Q4_32_Invenio