



JOB DESCRIPTION

Ref: 202401

Job Title: R&D Engineer for ODISSEE EU project

About EAS

With Energy Aware Solutions data centers get more Performance per Watt!

Our startup believes in efficient computing in HPC and AI. EAS is a service company providing installation, consulting, and support on EAR and in general energy and power management. We also co-develop the EAR software with the Barcelona Supercomputing Center and in particular the GPU energy optimization module which provides about 20 % of energy savings. EAR is transparent, independent from vendors, live at runtime, modular and easy to use.

The Energy Aware Solutions S.L. is a BSC-UPC Spin Off created in September 2020 with the aim of innovating and providing professional services and in the context of energy management and optimization for HPC & AI Data Centers. EAS headquarters is in Barcelona with an international team working in Barcelona or remotely. EAS technology is based on the EAR software. EAR is a European software tool for energy monitoring, management and optimization developed by BSC and EAS. EAR software is installed in many large European supercomputing systems like EDF in France, LRZ in Germany, SURF in the Netherlands and BSC-MN5 in Spain. EAS is also participating in an EU funded R&D project called DYMAN where new cooling technologies will be developed with EAR to manage the interactions between the IT servers and the cooling devices.

Context and Mission

As EAS, we are participating in EU R&D projects to contribute to the European strategic objectives of creating the most energy efficient European infrastructure for research. In particular, EAS will participate in the [ODISSEE](#) project with the role of being the key software component for energy management in the High Energy Physics and Astrophysics infrastructures in Europe, like HL-LHC, SKAO and SLICES-RI. These infrastructures will have special requirements in several contexts such as new hardware, new applications, new workflow tools and of course a better energy and power management using EAR and AI technologies.

Key Duties

- Contribute in the technical tasks in ODISSEE for EAR extensions and evaluation
- Participate and contribute in project meetings (periodic meetings and general meetings)
- Support in the project management and organization
- Generation of the deliverables and milestones required in ODISSEE
- Coordinate with the EAS team and BSC team developing other aspects of EAR.

Requirements

- Education
 - MSc in Computer Science or related discipline.
- Knowledge and Professional Experience
 - Mandatory:
 - Execution on UNIX/LINUX environments
 - To have good skills and experience in C programming
 - Experience on using HPC environments: Parallel jobs execution and SLURM scheduler utilization
 - Experience in using runtime libraries such as PAPI, likwid etc will be valued
 - Experience in previous EU projects will be valued
 - Experience on system administration will be valued
- Competences



- Candidates must be proactive, self-motivated individuals who can understand new technical concepts
- Candidates must be able to work on its own with self-organization
- Excellent written and verbal communication skills in English
- Ability to take initiatives, prioritize the tasks and work under set deadlines

Who you are

- Are you autonomous?
- Are you polyvalent?
- Are you motivated and willing to join a successful multicultural startup?
- Do you want to grow professionally and personally with the rapid growth of EAS?

Join us!

Conditions

We offer a full-time contract, a good working environment, flexible hours and remote work. Salary will depend on the qualifications and experience of the candidate. Start date January 2025.

Applications Procedure

All applications must be sent by mail ([hiring@ eas4dc.com](mailto: hiring@ eas4dc.com)) and has to include (not limited to):

- A motivation letter
- A personal letter about who you are and which competences and knowledge you accomplish
- A full CV including contact details and references