

About EAS

The Energy Aware Solutions S.L. is a Barcelona Supercomputing Center (BSC)-University Polytechnics of Catalonia (UPC) spin Off created in September 2020 with the aim of providing professional services in the context of energy management and optimization for Data Centers. EAS technology is based on the EAR software. EAR is a European open-source system software tool for energy monitoring, management and optimization.

Description of the internship

This internship is proposed to students attending the M2 CHPS Master which have successfully completed a class on performance evaluation. During the internship period the candidate will learn how to use the EAR software for performance analysis and energy optimization. Using EAR the candidate will evaluate the performance of some applications or workflows for a fine grain tuning of EAR energy policies with the final goal of generating an optimal policy configuration for the applications/workflows and identifying potential improvements of the EAR library, energy models, and/or energy policies.

The work will be done on a national HPC supercomputing center where EAR is already installed. The candidate will first have to learn about EAR utilisation from the perspective of an application specialist and to understand the basics of power/energy consumption.

Conditions

The internship will last at least 5 months, possibly 6. The work will be done remotely. EAS will provide remote access to the HPC supercomputing system to perform the internship work. Regular meetings will be done online. Salary will be around 1000€ per month full time. At the end of a successful internship, EAS may propose a full time job to the candidate. Therefore, the candidate should be motivated to work on energy optimization with EAS.