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Orchestrating Gaia-X Workflows in Cluster-Environments

Monday, October 23, 2023 12:00 PM (10 minutes)

Gaia-X is an initiative that develops, based on European values, a digital governance that can be applied to any existing cloud/ edge technology stack to obtain transparency, controllability, portability and interoperability across data and services. In this poster, we will present the intermediate results from our ongoing BMWk funded **Gaia-X4AI** project (<https://gaia-x4ki.eu/>), developing scalable gaia-x workflows for AI applications on compute clusters. We introduce our novel middle-layer, which allows to abstract resource aware scheduling of containerized gaia-x workflows on top of Slurm based HPC systems as well as on Kubernetes Clusters. We evaluate our approach on Use Cases in the context of autonomous driving applications, e.g. showing the deployment of compute intensive CARLA based simulations on our technology stack.

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