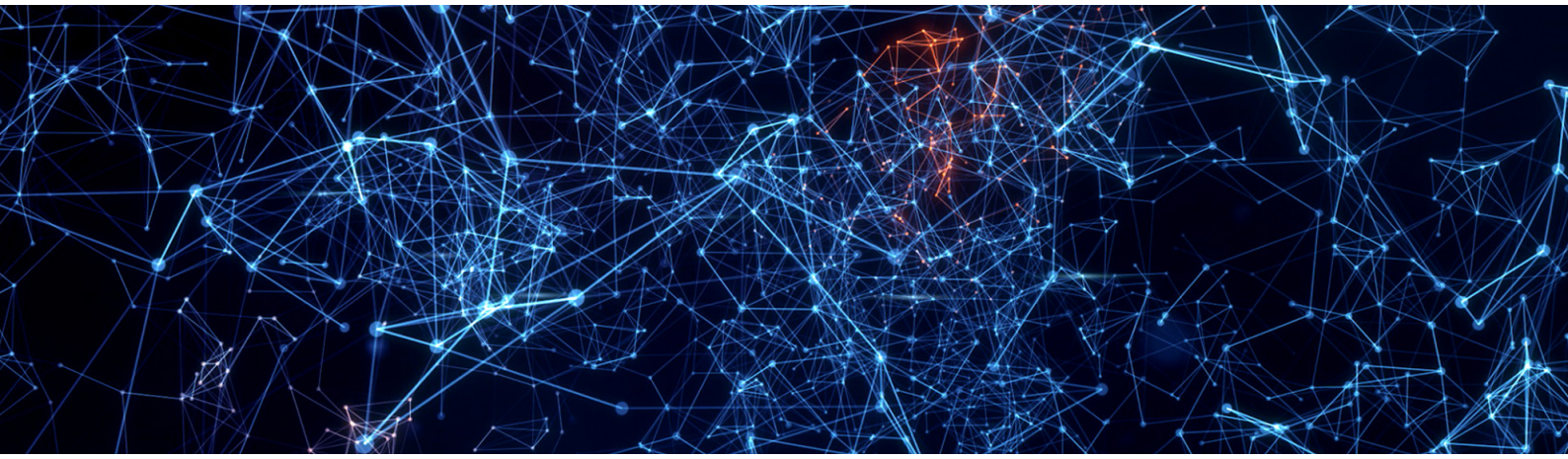
RAISE
Center of Excellence



## Drive. Enable. Innovate.

The European Center of Excellence in Exascale Computing "Research on AI- and Simulation-Based Engineering at Exascale" (CoE RAISE) is a project funded by the European Commission under the Horizon 2020 Framework Programme, European research infrastructures (including e-Infrastructures). In RAISE, researchers from science and industry develop novel, scalable Artificial Intelligence technologies towards Exascale along representative use-cases from Engineering and Natural Sciences.

## Research

In CoE RAISE, AI and HPC methods are developed along various use cases coming from different domains. CoE RAISE concentrates on scientific developments for compute- and data-driven applications, i.e., HPC codes and workflows from simulation science that deal with solving multi-physics multi-scale problems at large scale and cases that have a strong focus on processing big data in efficient workflows.

Use-Cases

AI at Exascale

Reference Codes

Publications

## Work Packages

The core of the technical developments is represented by the activities in the use-case work packages, which are subdivided into Compute-Driven Use-Cases towards Exascale (WP3) and Data-Driven Use-Cases towards Exascale (WP4). Vertically arranged to the use-cases is the work package on AI- and HPC-Cross Methods at Exascale (WP2). WP1 is furthermore the overarching structure to the work packages on Business Development (WP5) and Outreach and Services (WP6).

## Service Portal & Training

To enable Europe's industrial and academic sector to further develop and utilize novel HPC-based AI methods, it is mandatory to bridge the expertise developed in CoE RAISE directly to the user communities. This can only be achieved by tailored support, training, and educational activities.

## Partners

**Contact:** coe-raise.eu | raise_info@fz-juelich.de

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