

Administration of the high-performance GPU cluster at IPE

HiWi Position

To support the development of parallel algorithms, a heterogeneous cluster is operated by IPE. Several generations of parallel accelerators from different HPC vendors are available to the scientists. Due to the heavily heterogeneous configuration and rapid changes of the parallel programming SDKs, the administration of the system is complicated and time consuming.

The student will take care for the administration of the cluster hardware and software. The task includes:

- System maintenance and upgrades
- Installation of additional hardware nodes and components
- Configuration of Infiniband and MPI communication stacks
- Maintenance of parallel SDKs from AMD, Intel, and NVIDIA
- Administration of Nagios configuration and scripts
- Problem diagnostics for software and hardware

Required Skills:

Very good knowledge of Linux and the ability to find and solve system problems; scripting languages.

Conditions:

The position is intended as a long-term engagement with a work time of about 30h per month.



Supermicro GPU Server



*PCIe 2.0 Extension Box
with 4 GPU adapters*

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