

Hybrid Small Size hpcResource

László Kovács

Faculty of Informatics, University of Debrecen, Debrecen

In our presentation we will introduce a new hybrid micro HPC, which can support the research, the real-time applications, visualization and demonstration of the results in small-roomed places without air-conditioning, when the problem complexity is still enough demanding the high performance such as in surgery. It enables also the creation of that hybrid algorithmic solution which can make smart selection of the achievable processors based on requirements. Among the planned field of applications, there are the mathematics, bioinformatics and medical treatment which contains the research and application of the fusion models, optimizations, image-, video-processing and visualization.

This work was supported in part by Nvidia, Hungarian National Talent Program and the project VKSZ 14-1-2015-0072, SCOPIA: Development of diagnostic tools based on endoscope technology supported by the European Union, co-financed by the European Social Fund.