

ABSTRACT

MULTIPROCESSOR AND GRID TECHNOLOGY IN MEDICAL IMAGE PROCESSING (CONCLUSIONS OF IKTA-00153/2002 PROJECT)

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In 2002, a consortium led by the PET Centre of the University of Debrecen won an IKTA tender with a duration of 3 years. The main goal of the project was to shorten some very time consuming medical image processing methods significantly with the aid of parallel computing (i.e. to minutes instead of days). The project had a number of threads. One of these was our task to develop a suitable environment for parallel processing. We made experiments with dedicated clusters and with a grid environment created from various clusters. In the latter case we tried to find a good method for connecting separate clusters into a grid with only minimal changes in the original clusters, while reaching maximum computing power at the same time if possible. This presentation wishes to summarize conclusions of this part of the project.