Heterogeneous Computing

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Node level heterogeneous architectures have become attractive during the last decade for several reasons: compared to traditional symmetric CPUs, they offer high peak performance and are energy and/or cost efficient. With the increase of fine-grained parallelism in high-performance computing, as well as the introduction of parallelism in workstations, there is an acute need for a good overview and understanding of these architectures. This presentation will give an overview of heterogeneous computing, with special focus on one commonly found architecture: graphics processing units (GPUs).