Multicore processors have paved the way to increase the performance of any application by the virtue of benefits of parallelization. However, exploiting parallelism from a program is not easy, as it requires parallel programming expertise. In addition, manual parallelization is a cumbersome, time consuming and inefficient process. A number of tools proposed in the past ease the effort of parallel programming. This paper presents a classification of such parallelization tools. The classification is based on different eras of tool development, role played by these tools in various parallelization stages, and features provided by parallel program assistance tools. Classification of tools concludes with a discussion on requirements of futuristic parallelization tools. Finally, this paper proposes our on-going work about the development of a parallel program assistance tool called EasyPar, which is a parallel program assistance tool.
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