Coarse grain parallelization using Integer Programming

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Abstract—There is an increasing need for automatic tools and techniques for application parallelization. Within the ALMA toolset, programs written in Scilab are automatically parallelized for execution on embedded multicore platforms. In this paper, key parts of the coarse grain parallelism optimization are presented. The coarse grain parallelism optimization considers the hierarchical task graph of a program and produces an optimized parallel schedule.

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