Paper : **Iterative Compilation in a Non-Linear Optimisation Space**

Objective : reduce the search space using profile feedback

Compiler : compiler framework developed to optimise multimedia codes for embedded systems

CPU : UltraSparc, R10000,Pentium Pro, and TriMedia -1000

Method/algorithm : search algorithm that tries to find the best performance within the fewest number of evaluations

Benchmarks/programs : Matrix multiplication

Optimizations : Loop Unrolling 1-20, Tiling 1 -100, Padding 1-10

Comparison : compare to non-optimized version

Metrics: compilation time/ execution time 🡪 simulator.

**Paper :** a platform independent optimisation approach based on feedback-directed program restructuring.

Objective : examines a feedback assisted approach based on traversing an optimisation space.

Compiler : native compiler

CPU : six different platforms : Alpha 21164, Alpha 21264, Pentium II, Pentium III, HP-PA 9000/712, Ultrasparc

Method/algorithm : two strategies that search the optimisation space by means of profiling to find the best possible program variant. These strategies have no a priori knowledge of the target machine and can be run on any platform

Benchmarks/programs : 3 full SPEC benchmarks (Tomcatv, Swim, Mgrid)

Optimizations : Padding, Loop Unrolling, Loop Tiling

Comparison : to native compiler with full optimisation/ Compaq compiler with the optimisation level set to -O5

Metrics: execution time

**Paper :**

Objective :

Compiler :

CPU :

Method/algorithm :

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