



A Framework for static allocation of parallel OpenMP code on multi-core platforms

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Introduction





Context and motivations





OpenMP





OpenMP - Structure





A DICAL NATION



Conclusion

$\mathsf{OpenMP} - (\mathsf{Semantics})$





OpenMP - Framework subset





Clang





Clang - LLVM

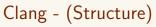




Clang - AST

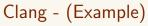
















Test





Clang - OpenMP





The framework





General Design





Big-graph image





Simple example





Pragma extraction





Intrumentation for profiling





Intrumentation for profiling - Annotated example





Flow graph





Scheduler





Scheduler - Search tree





Scheduler - Constraints check





Scheduler - (Cetto & Chetto)





Final execution





Final execution - Intrumentation





Final execution - Run-time





Fianl execution - (thread pool)





Final execution - (multiple job queues)





Final execution - (synchronization)





General structure





General structure -(graph of the test code)





Results





Results - (some tables and graphs)











Test

Conclusion

Results - (service time - boxplot)





Results - (Jitter)





Results - Comments





Test

Framework

Introduction



