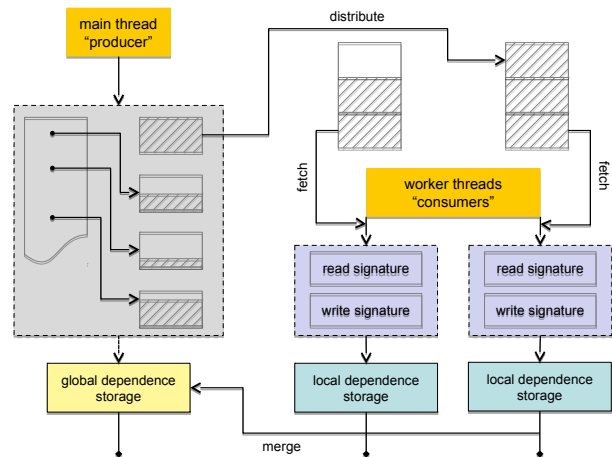


## Bachelor/Master's Thesis

<An Exploratory Study of Data Dependency Profiling and Representation>

### Motivation

Parallelization of programs is the key to exploiting the computing power of multi- and manycore systems. Knowing a program's data dependencies is the main requirement for parallelization. There are many tools to extract data dependencies from programs. The goal of the thesis is to compare the existing tools. We also look for opportunities to extend these tools to extract dependencies more efficiently.



Architecture of a parallel data-dependence profiler for sequential programs.

### Task

The thesis is organized in three steps. First, you will familiarize yourself with selected existing dependency-analysis tools. Based on the knowledge you acquired in the first step, you will transfer your insights to an existing tool implemented in C/C++. Finally, you will summarize your insights in a systematic overview of the tools.

### Requirements

- C/C++

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