A Limit Study of JavaScript Parallelism
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defining parallelism
for real websites!

event based
look for register and memory dependencies between tasks and loops from interpreted JS log
dynamic call graph
cycle counting
Instrumented the SquirrelFish interpreter

How we divide up tasks

function f() {
    var i = 0;
    g();
    i++;
    for (var j = 1; j < 3; j++) {
        i += j;
    }
    return i;
}

function g() {
    return 0;
}

Speedup for function and loop tasks

speedup loop

speedup

Percentage of dependency type

CDF of the fraction of events with a specific speedup in Google Wave