Project 2

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1 Results

For experiment 1, a shell script was executed that ran the simulator all possible combinations of (F, k0, k1, k2) lesser than or equal to the default values for each of the four traces. For tuples whose IPC is at least 98% of IPC from default parameters, a graph was plotted using `gnuplot` to show the monotonic increase in IPC with tuple sum.

For experiment 2, a shell script was executed that ran the simulator for all possible values of R lesser than the default value. For R values whose IPC is at least 98% of IPC from default parameters, a graph was plotted using `gnuplot` to show the monotonic increase in IPC with number of ROB entries.
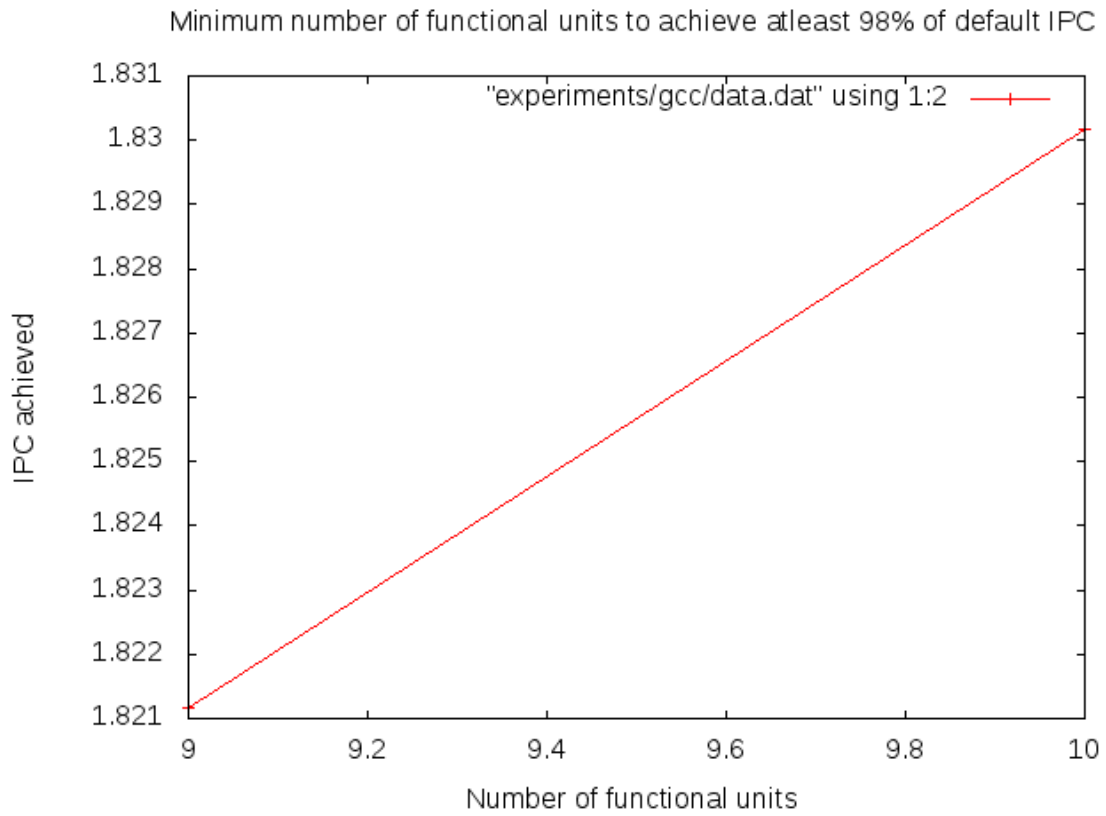
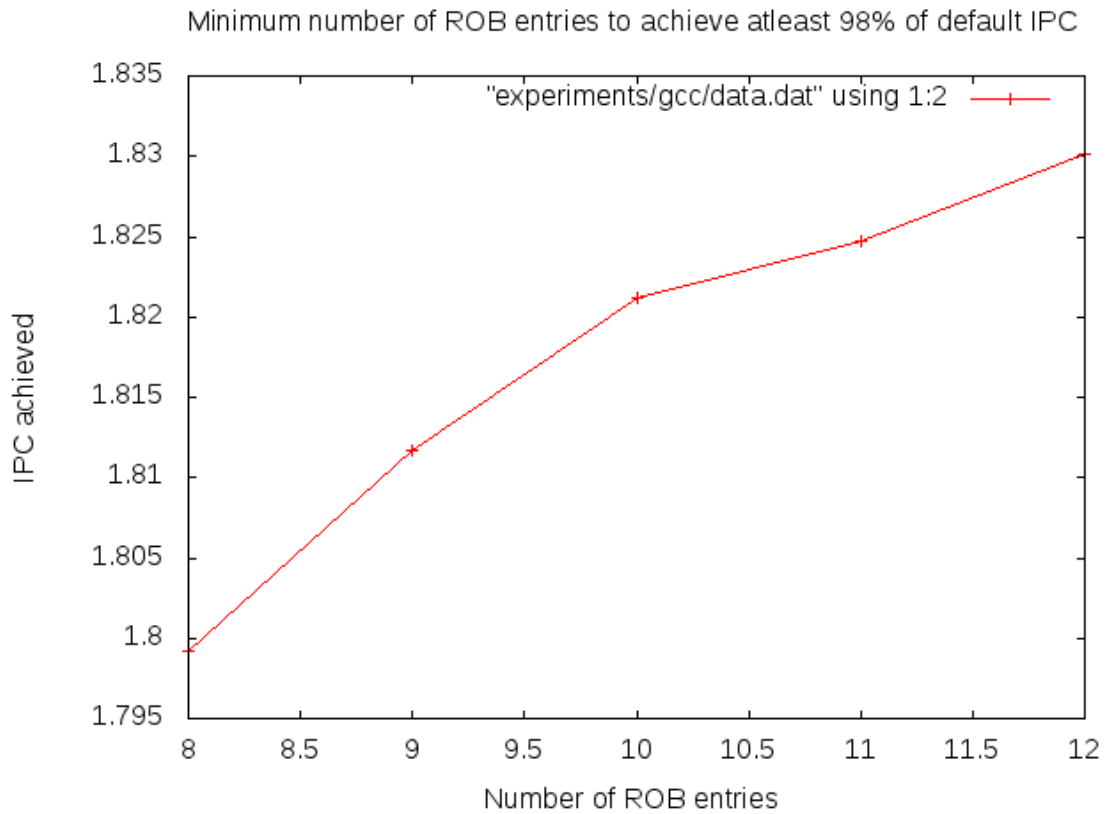Figure 1: Results for experiment 1 with GCC trace

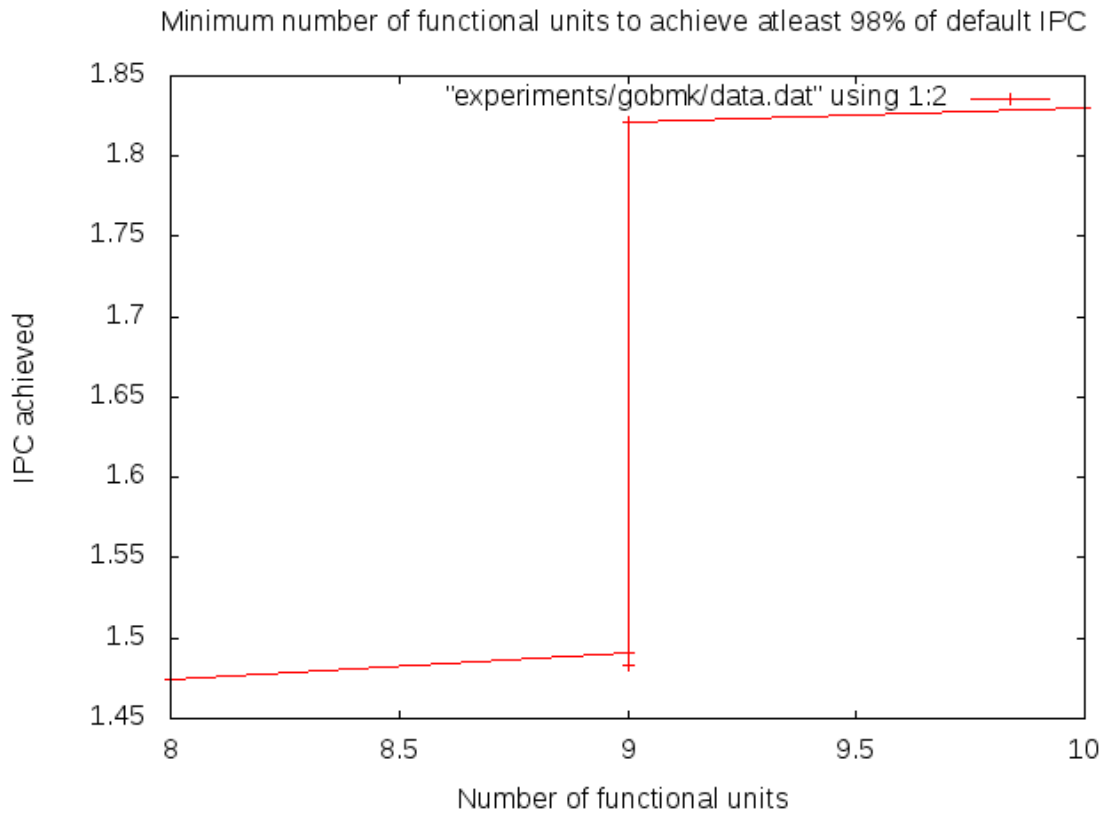Figure 2: Results for experiment 2 with GCC trace

Figure 3: Results for experiment 1 with GOBMK trace
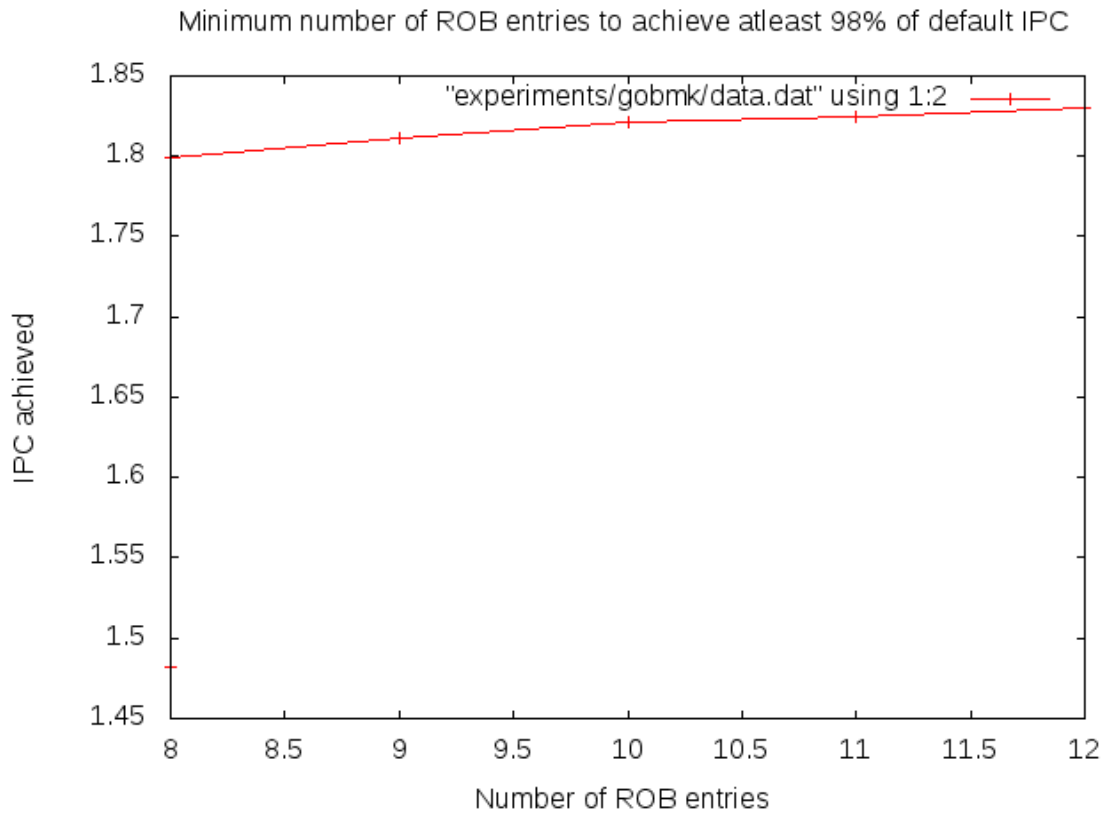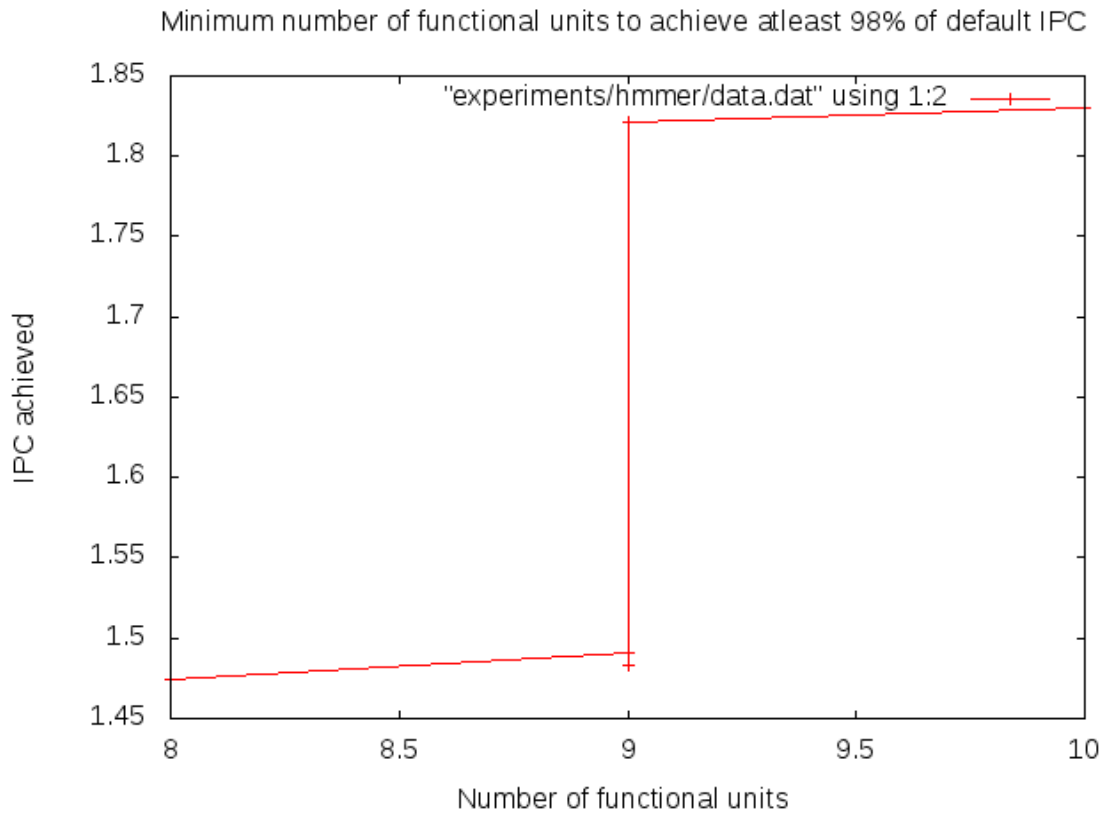

Figure 4: Results for experiment 2 with GOBMK trace

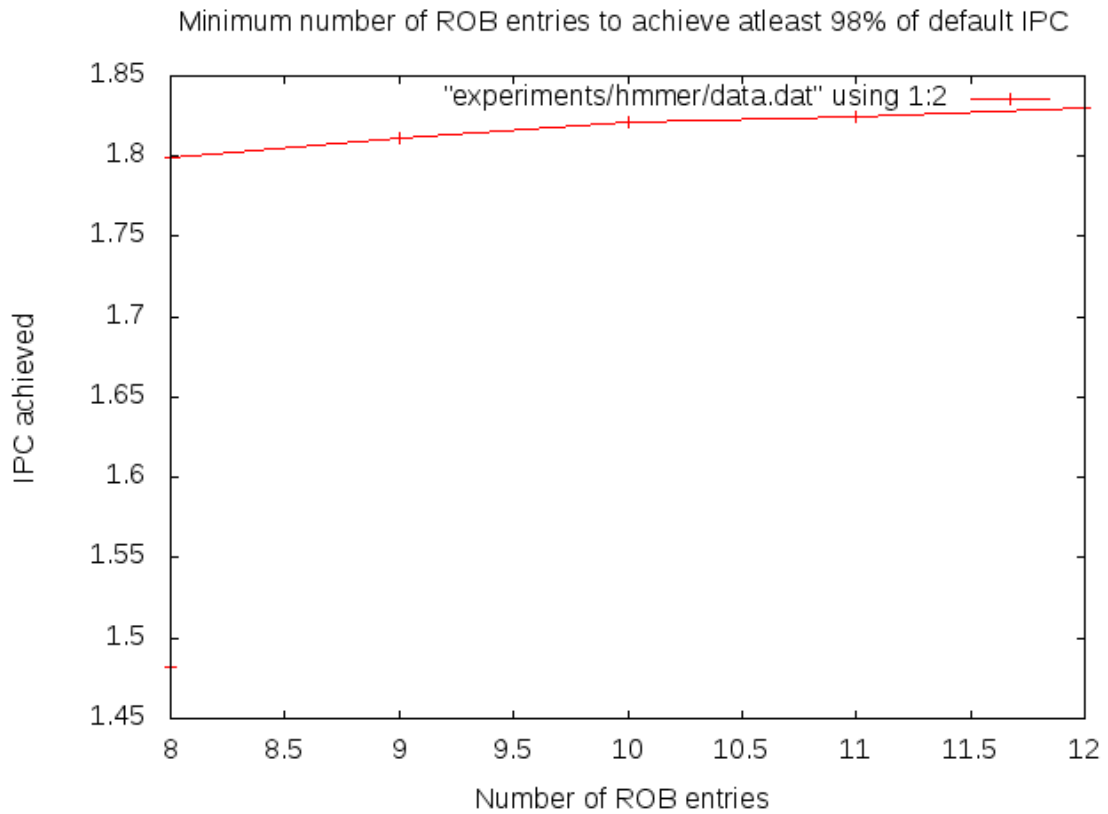Figure 5: Results for experiment 1 with HMMER trace

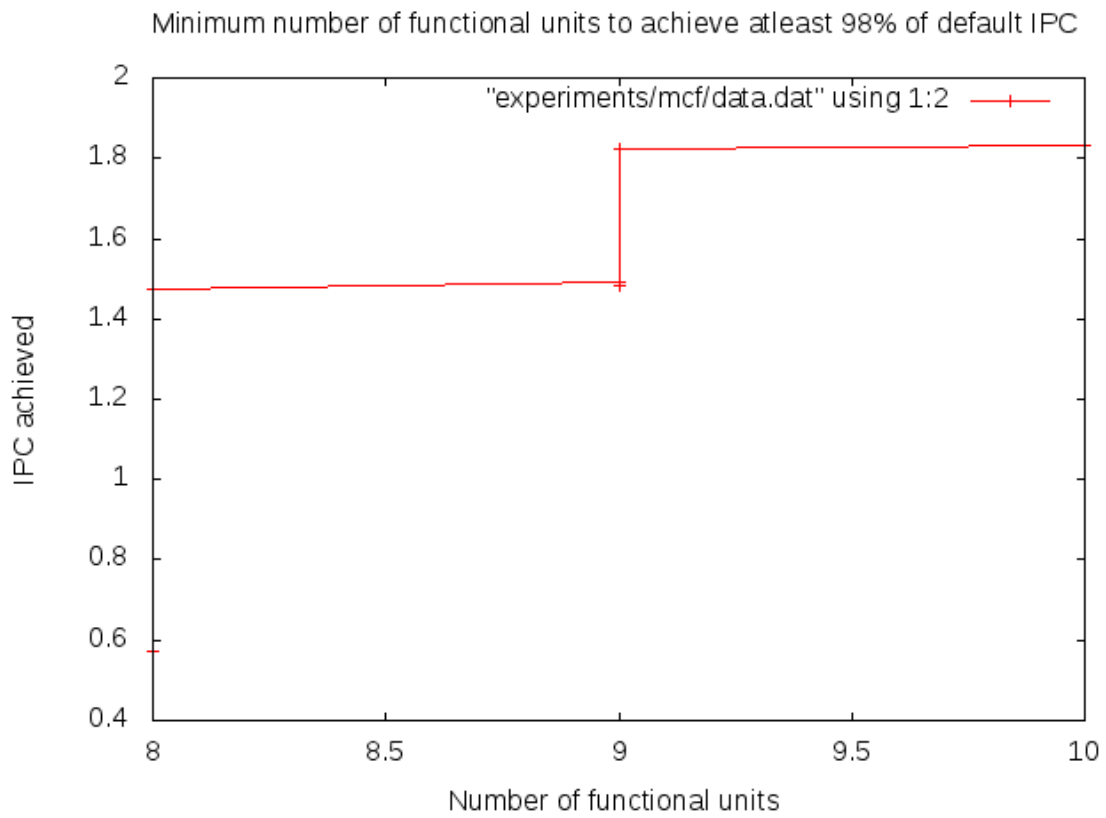Figure 6: Results for experiment 2 with HMMER trace

Minimum number of functional units to achieve atleast 98% of default IPC

Figure 7: Results for experiment 1 with MCF trace
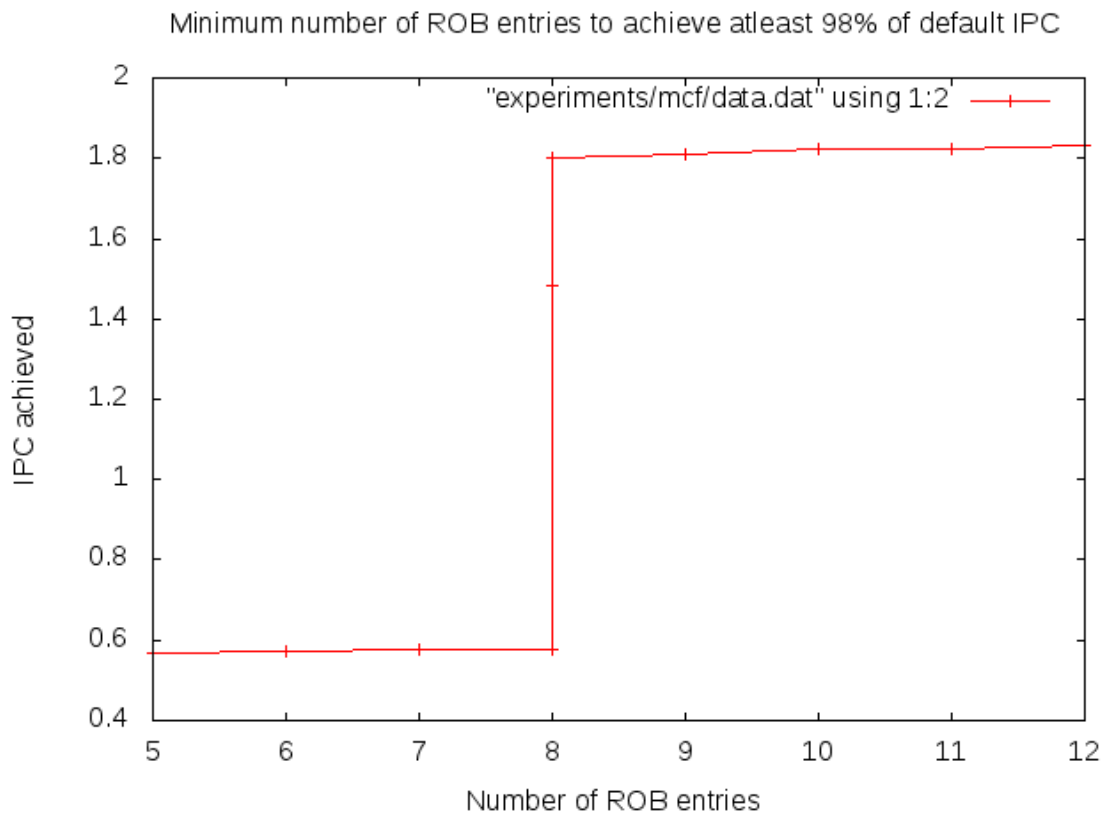
Minimum number of ROB entries to achieve atleast 98% of default IPC

Figure 8: Results for experiment 2 with MCF trace