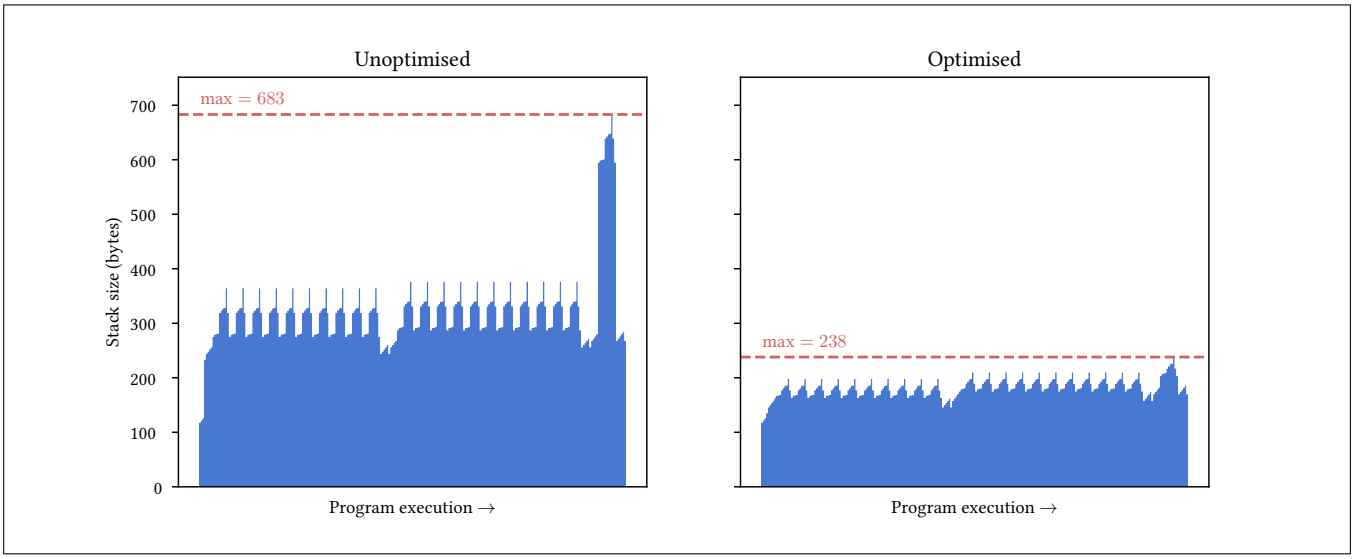
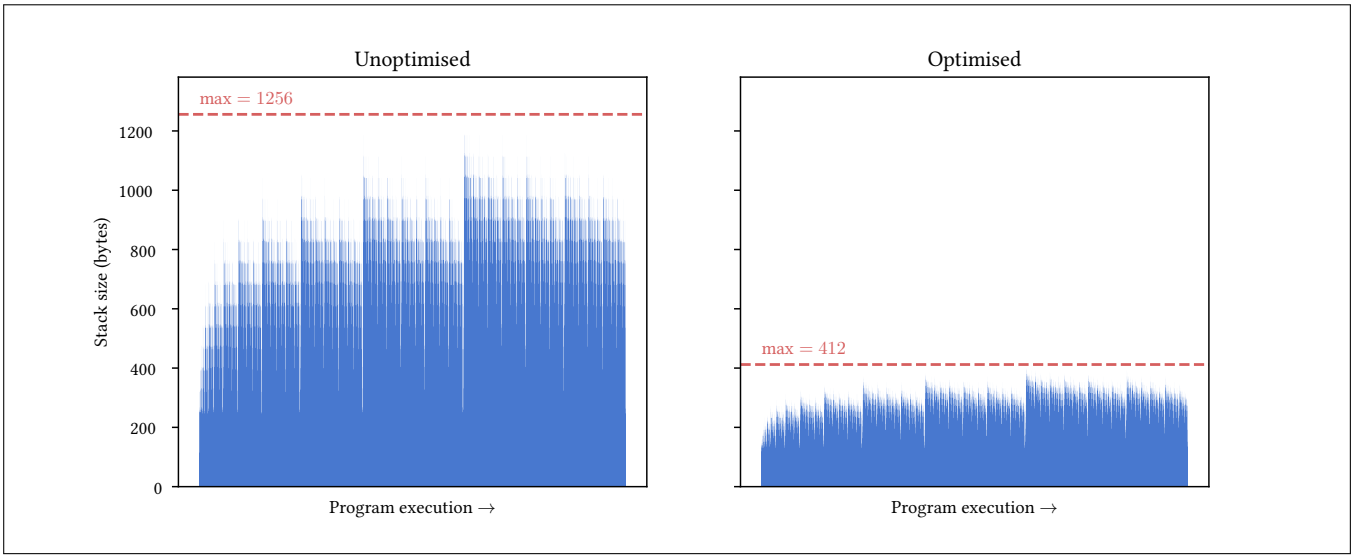
1 Impact of stack allocation optimisation

`01-case-compare.pgf`



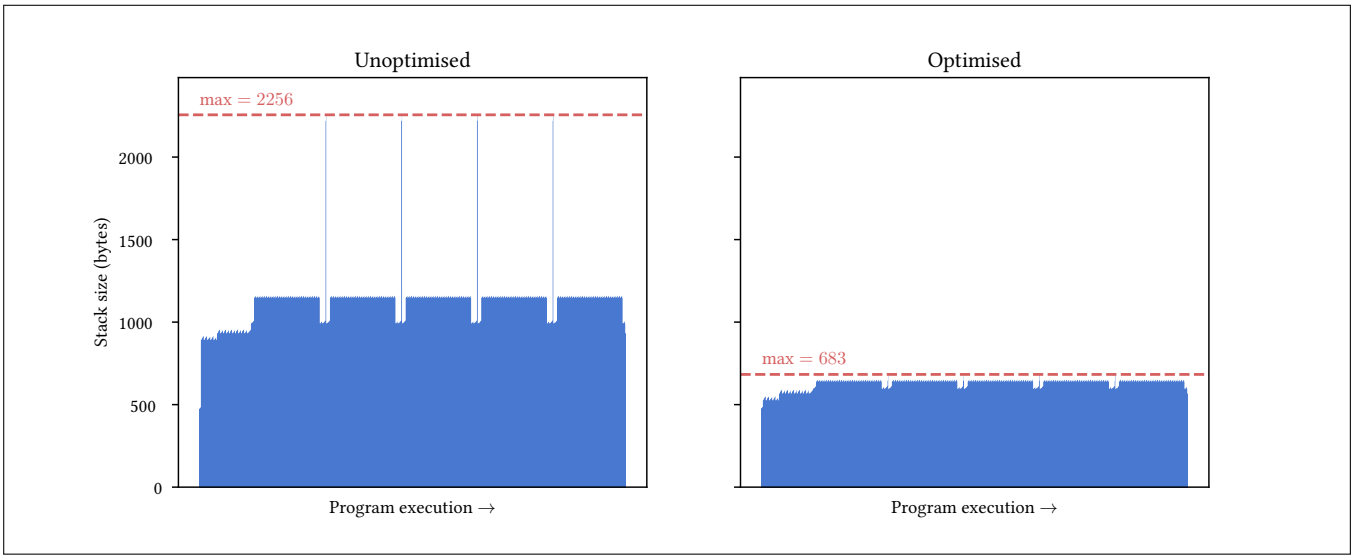
Percentage decrease: 65.15%

`02-fibonacci-compare.pgf`



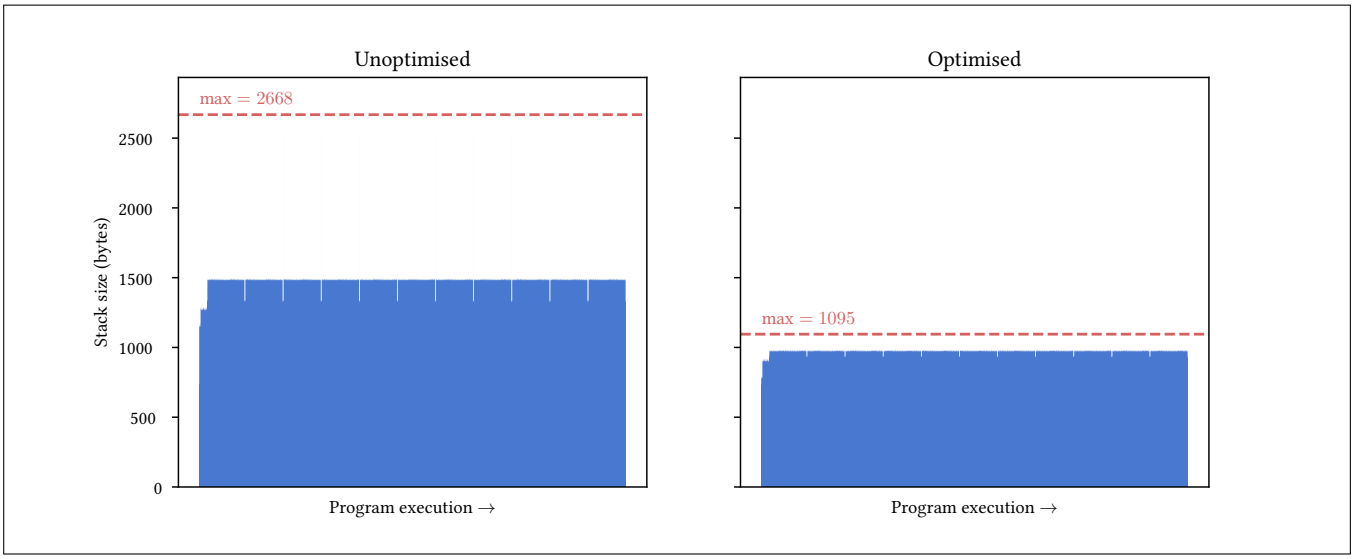
Percentage decrease: 67.20%

03-gameoflife-blinker-compare.pgf



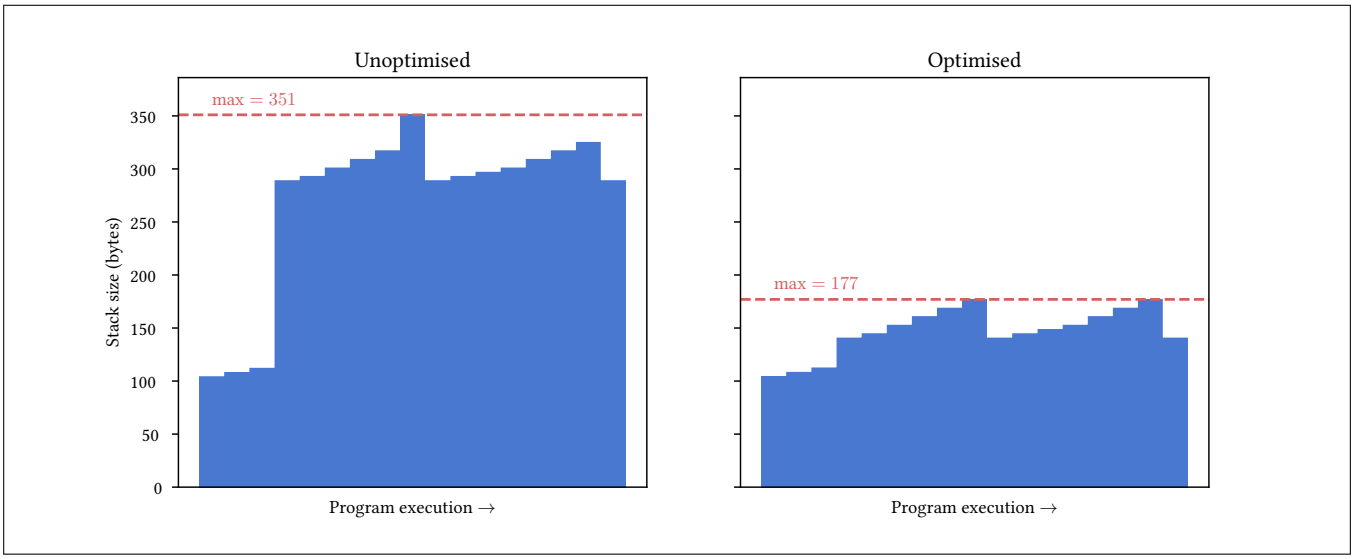
Percentage decrease: 69.73%

04-gameoflife-pulsar-compare.pgf



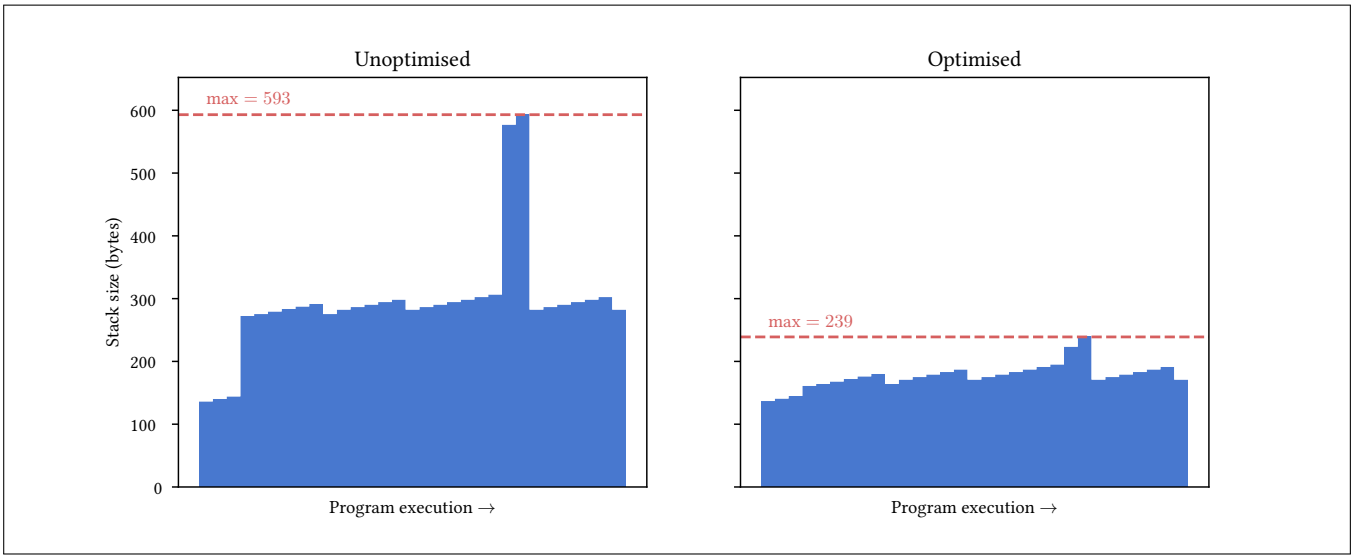
Percentage decrease: 58.96%

05-gcd-compare.pgf



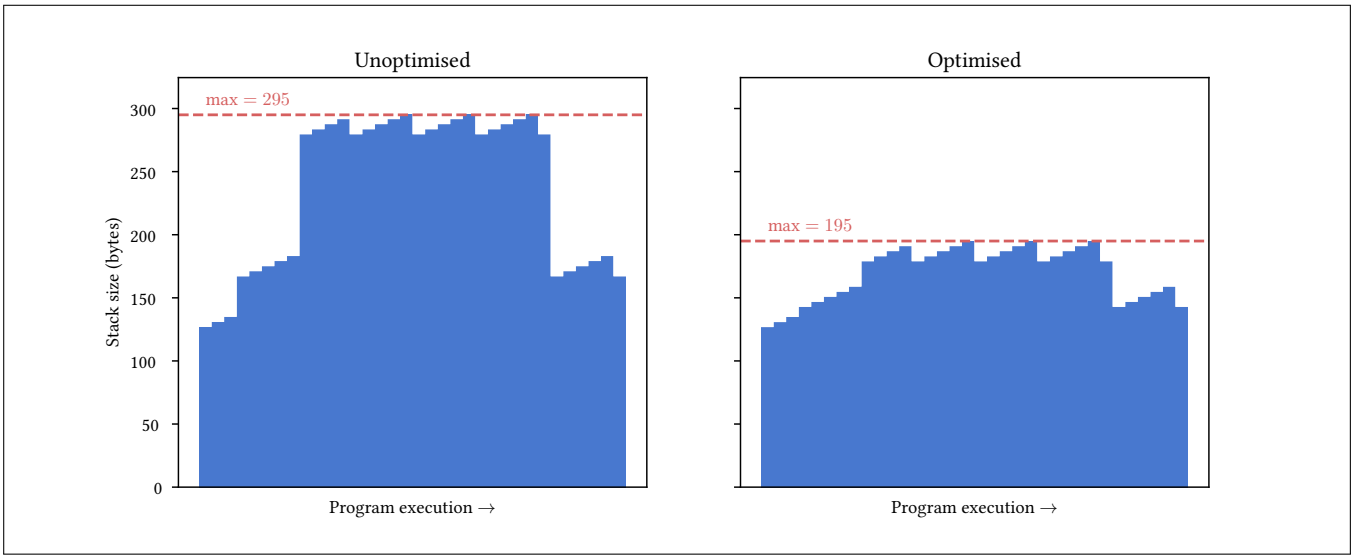
Percentage decrease: 49.57%

06-hexify-compare.pgf



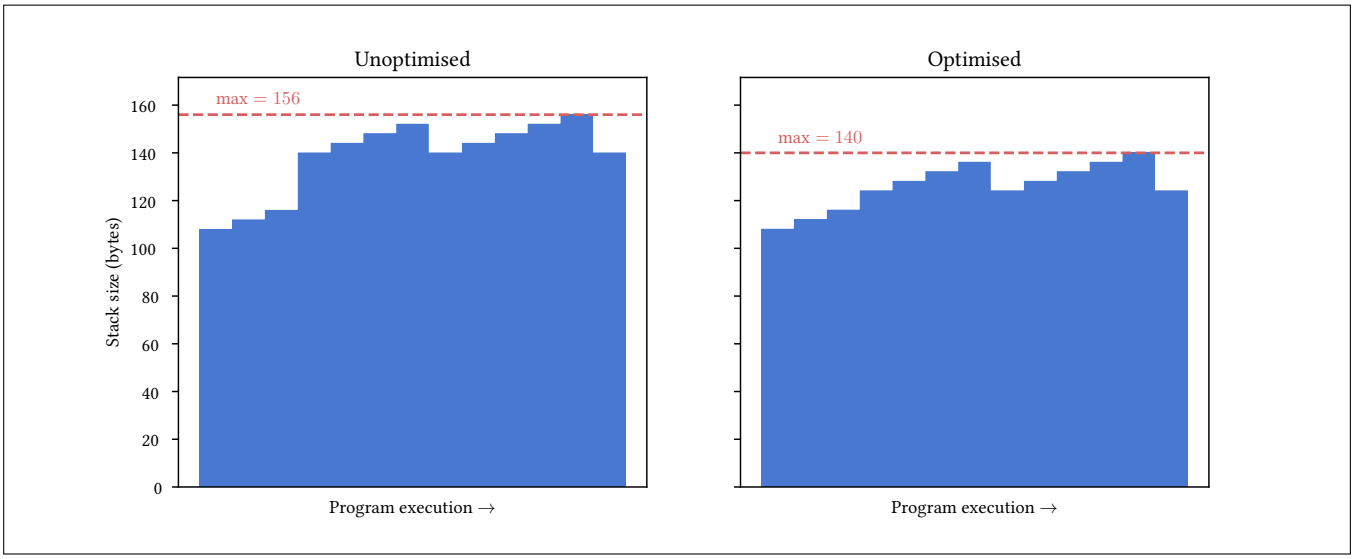
Percentage decrease: 59.70%

07-occurrences-compare.pgf



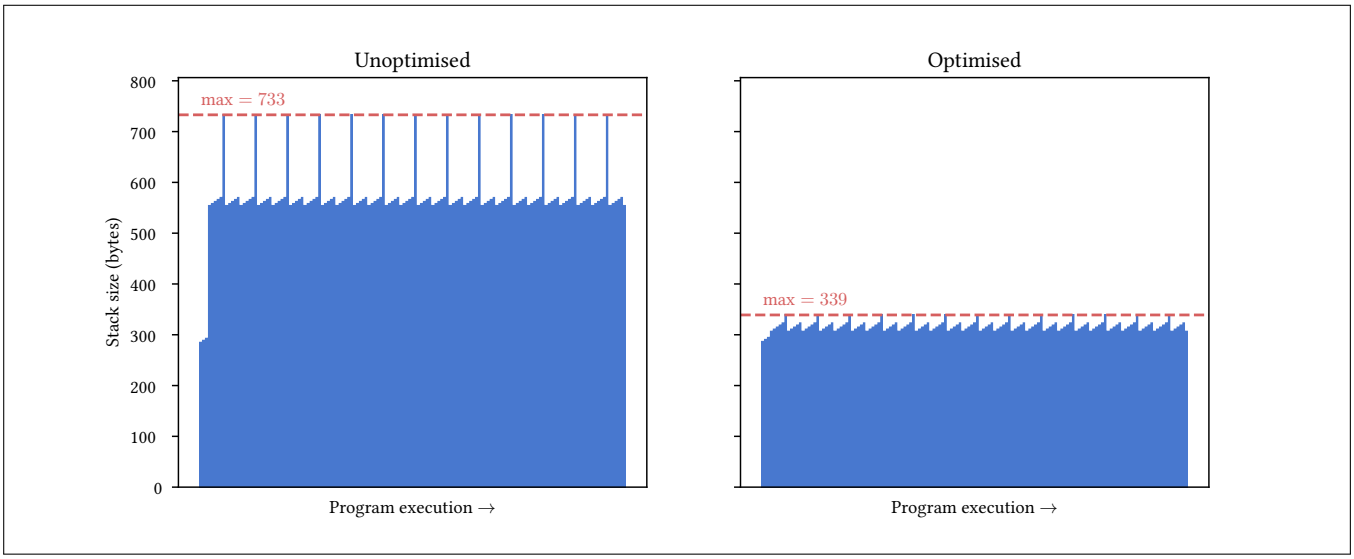
Percentage decrease: 33.90%

08-strlen-compare.pgf



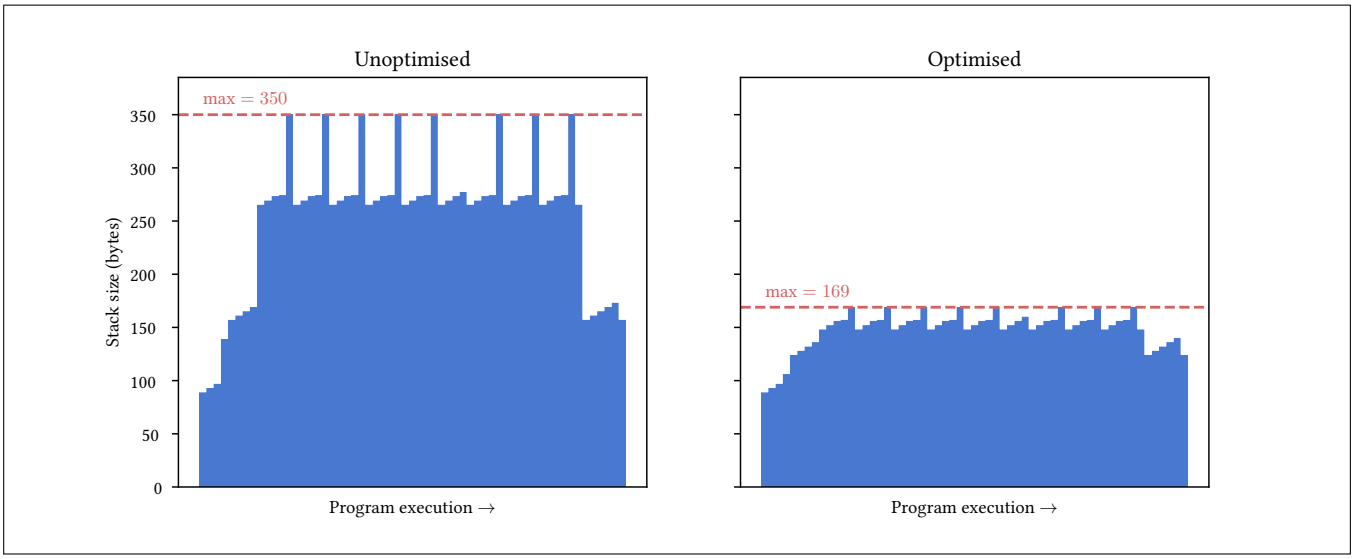
Percentage decrease: 10.26%

09-wildcardcmp-compare.pgf



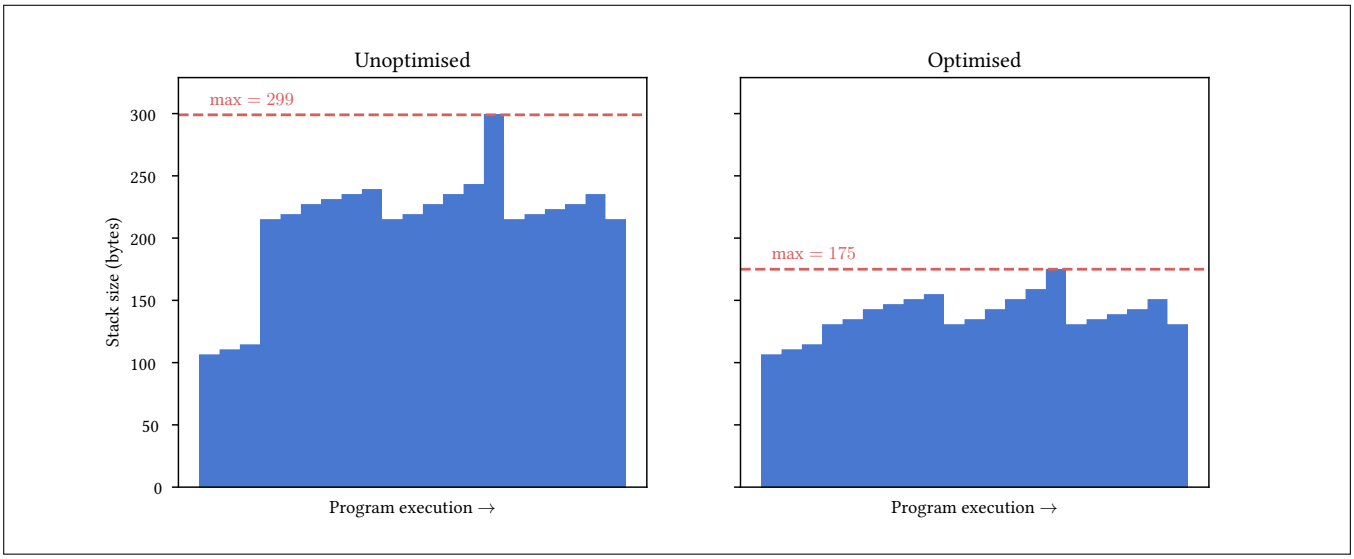
Percentage decrease: 53.75%

10-trim-compare.pgf



Percentage decrease: 51.71%

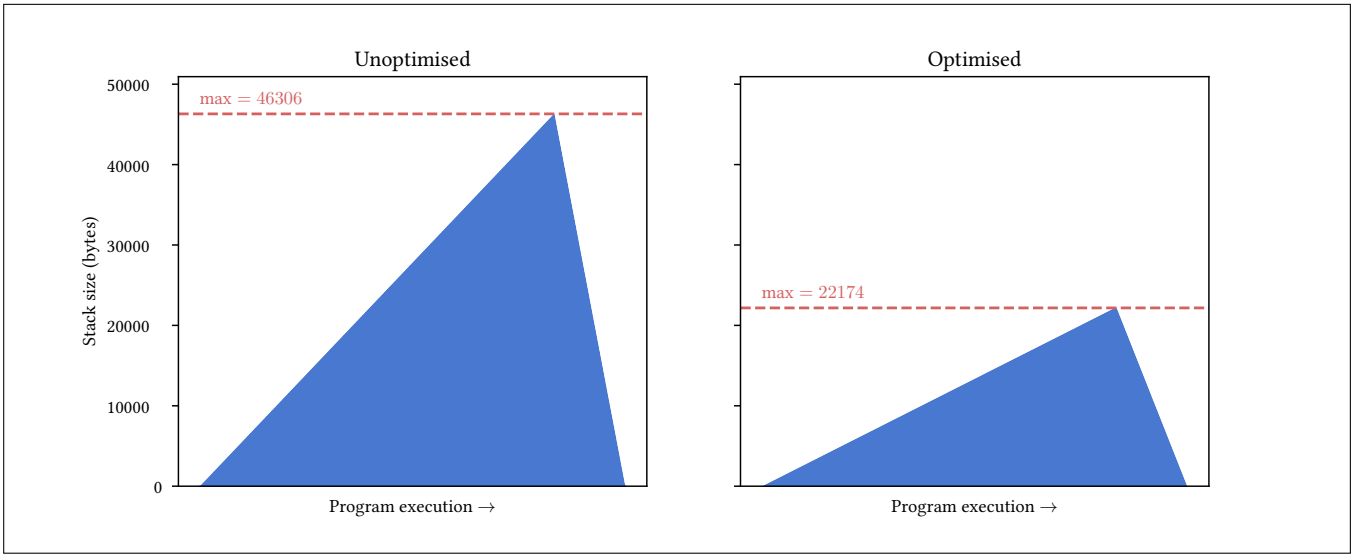
11-tailcall-sum-compare.pgf



Comparing the stack allocation of the `tailcall-sum` program, both with tail-call optimisation enabled, without and with stack allocation optimisation.

Percentage decrease: 41.47%

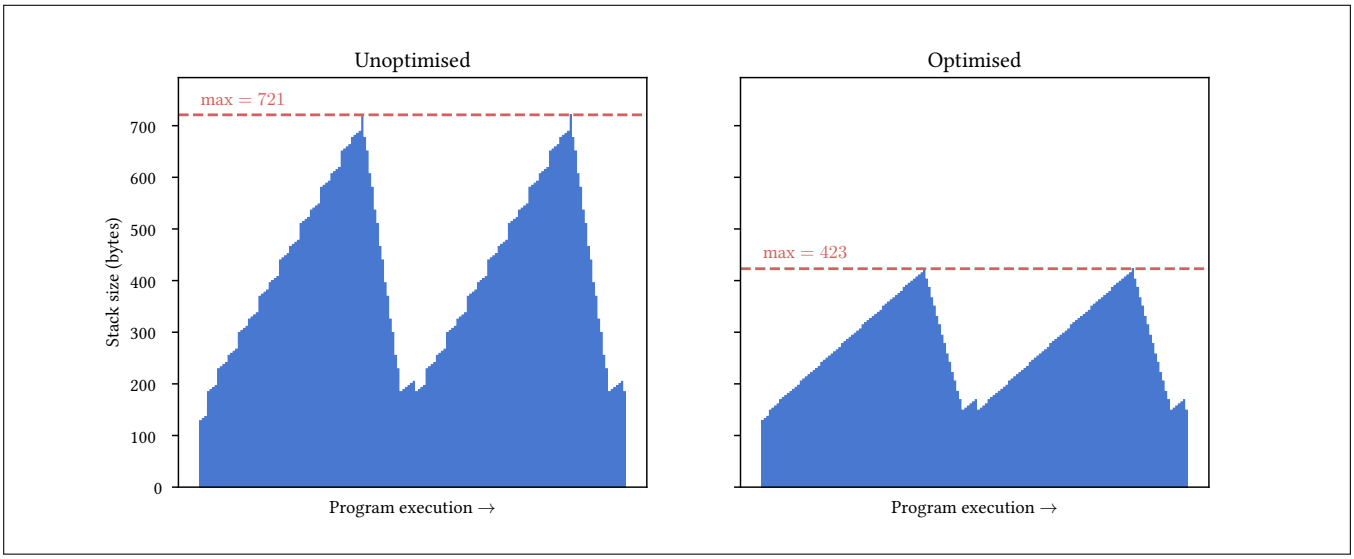
12-tailcall-sum-compare-without-tailcallopt.pgf



Comparing the stack allocation of the `tailcall-sum` program, both with tail-call optimisation disabled, without and with stack allocation optimisation.

Percentage decrease: 52.11%

13-non-recursive-tailcall-compare-without-tailcallopt.pgf

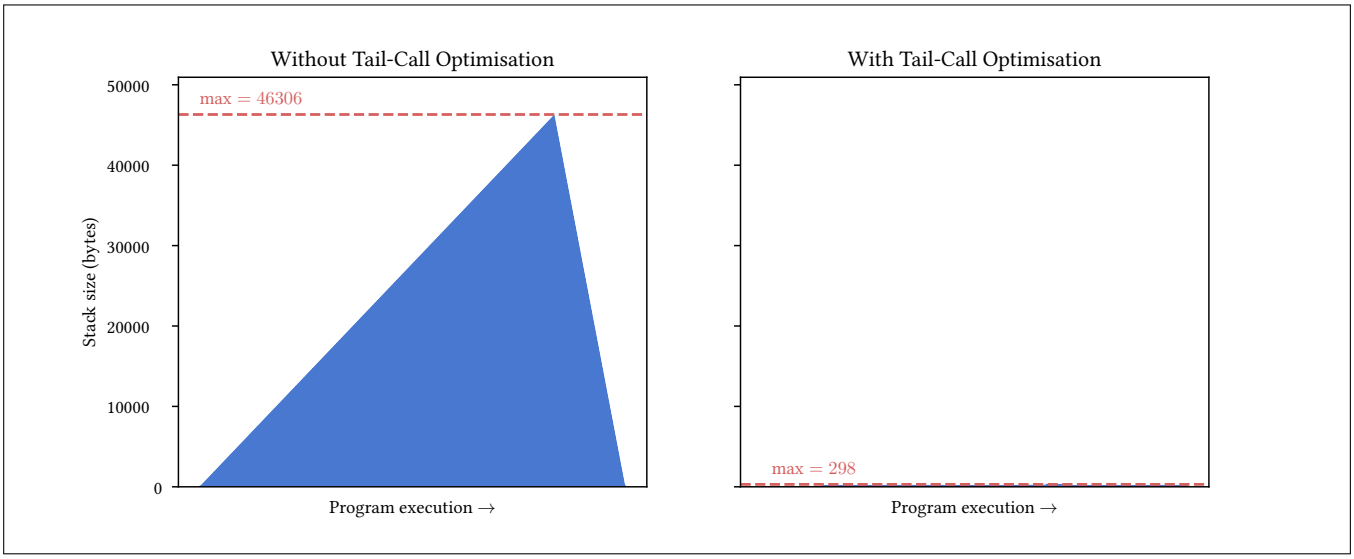


Comparing the stack allocation of the `non-recursive-tailcall` program, both with tail-call optimisation disabled, without and with stack allocation optimisation.

Percentage decrease: 41.33%

2 Impact of tail-call optimisation

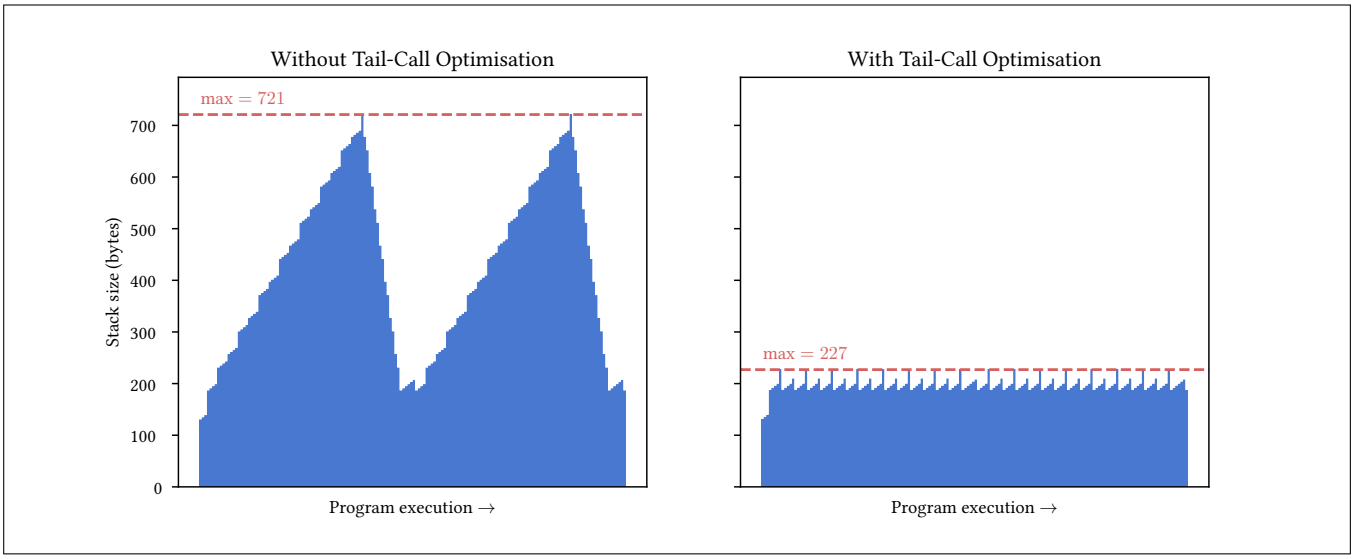
22-tailcall-sum-compare-tailcallopt-without-stackopt.pgf



Comparing the stack usage of `tailcall-sum`, with and without tail-call optimisation. Stack allocation optimisation is disabled in both cases.

Percentage decrease: 99.36%

23-non-recursive-tailcall-compare-tailcallopt-without-stackopt.pgf



Comparing the stack usage of `non-recursive-tail-call`. The program has tailcalls that are mutually recursive but not self recursive. Stack allocation optimisation is disabled in both cases.

Percentage decrease: 68.52%