

The following benchmark was done on a machine with an Intel core i7-7700K CPU and a GeForce GTX 1080 Ti GPU. As a comparison for the CUDA implementation, we use the multithreaded enumeration algorithm from the fplll library. For each dimension, four knapsack matrices with a uniform 350-bit column were used as lattice, and the graph shows the median of the running time of both implementations. The matrices can also be reproduced using the tool latticegen from the fplll library (via `latticegen -randseed $s r $dim 350` for $s \in \{0, 1, 2, 3\}$). The results are displayed in figure 1.

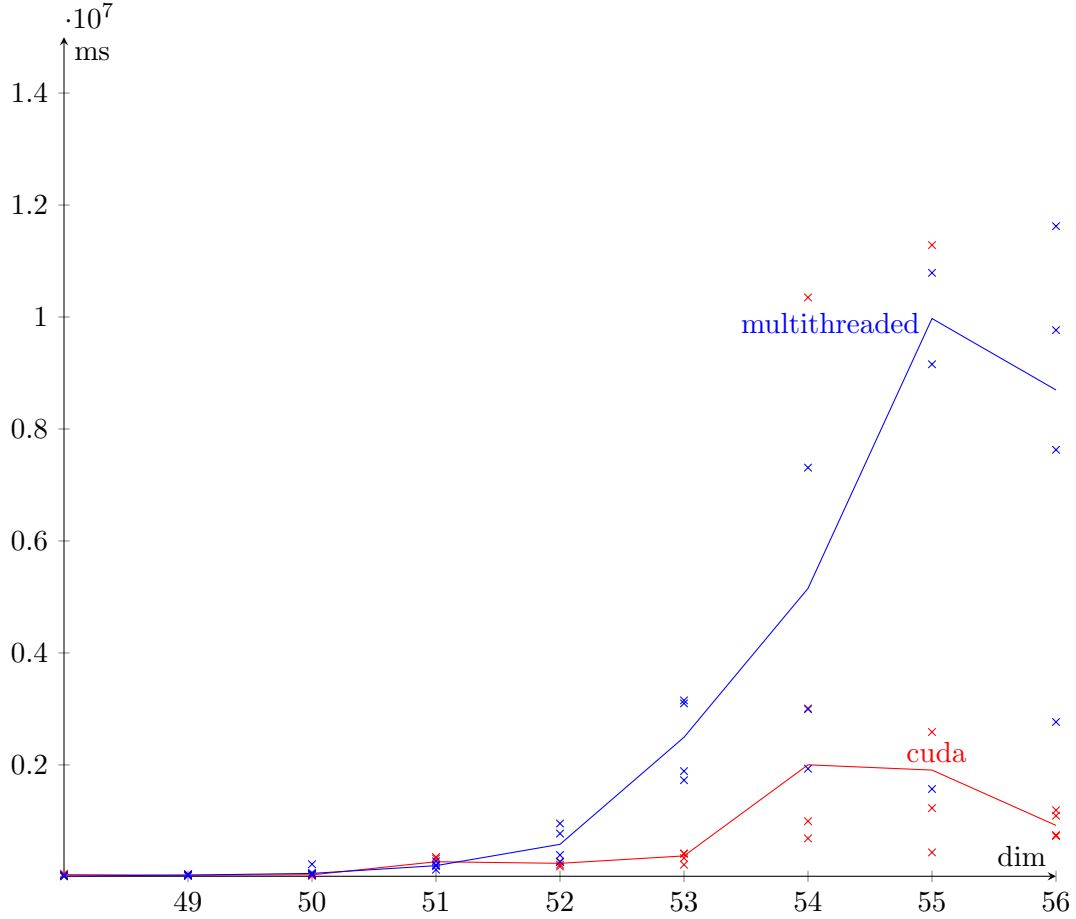


Figure 1: Performance of cuda enumeration (red) and multithreaded enumeration (blue); some data points are clipped