

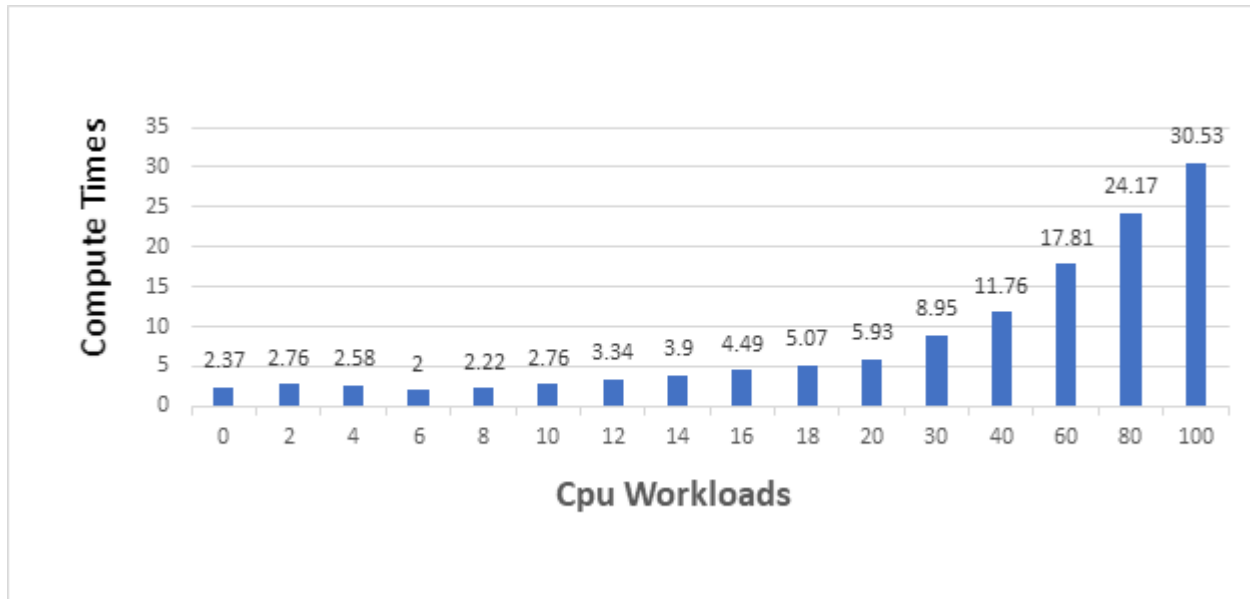
Deontee Hendricks

Project 6 Report

Burtscher CS 4380/5351

Due: 12/5/2019

6.1a)



6.1b)

Initial drop potentially caused by less overhead from data being transferred between device and host. Compute time grows super linearly as CPU's workload increases due to the CPU's slower execution speeds.

6.1c)

6% CPU usage

6.1d)

The best hybrid execution was .37 seconds faster.

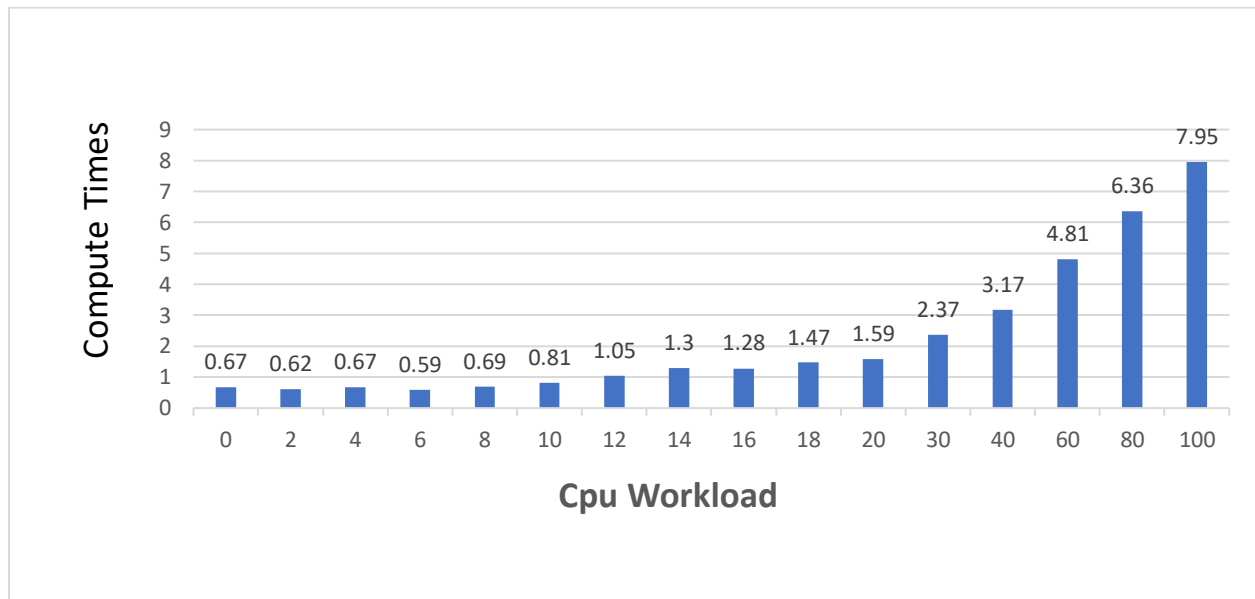
6.1e)

20 threads. This is specified in collatz_hyb_noMPI.sub. ("export OMP_NUM_THREADS=20")

6.1f)

12 cores per socket (48 cores/node). Hyperthreading IS enabled.

6.2a)



6.2b)

2% CPU usage.

6.2c)

1.13 seconds faster

6.2d)

Load imbalance if the work is not evenly divisible. This could also lead to longer process idling times.