# **Big Problem - MPI**

Final Max, Min, and Runtimes after looping 100 times, with number of pages = 1600.

### 1 Process

Max	0.000973
Min	0.000277
Runtime	16.0040788650512695

### 2 Processes

Max	0.000973
Min	0.000277
Runtime	14.9586315155029297

### 4 Processes

Max	0.000973
Min	0.000277
Runtime	7.6183333396911621

# 8 Processes

Max	0.000973
Min	0.000277
Runtime	3.8295812606811523

### 16 Processes

Max	0.000973
Min	0.000277
Runtime	2.4961822032928467

All of these tests had the same results of min and max values, and they all had the final vectors add up to 1.0. This indicates that I'm either doing it wrong for all of them, or it is actually working properly. The speedups are all positive, as going from 1 process to 16 for a larger problem like this is expected to be beneficial.