

CS698L Assignment-4

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Machine Specifications

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CPU(s): 12
On-line CPU(s) list: 0-11
Thread(s) per core: 2
Core(s) per socket: 6
Socket(s): 1
Model name: Intel(R) Core(TM) i7-8700 CPU @ 3.20GHz
CPU MHz: 900.009
CPU max MHz: 4600.0000
CPU min MHz: 800.0000
L1d cache: 32K
L1i cache: 32K
L2 cache: 256K
L3 cache: 12288K
```

Compiling and Running Instructions

All the problems have a README.txt file in their corresponding folder, which has all the compiling and running instructions.

Problem 1

Reference	5.162 sec
OpenMP	2.036 sec
SpeedUp	2.53

Problem 2

Reference	0.0576 sec
Thread-Local, Atomic	0.0199 sec
Thread-Local, Atomic SpeedUp	2.89
Work-sharing Construct	0.0140 sec
Work-sharing Construct SpeedUp	4.11
OpenMP Tasks	0.0468 sec
OpenMP Tasks SpeedUp	1.23

Problem 3

Reference	0.594 sec
OpenMP	0.328 sec
SpeedUp	1.81