

# Run Times of Pthreads Matrix-Vector Multiplication

CS 625 Parallel and Distributed Computing

Spring, 2011

## Original algorithm

Threads	Matrix Order					
	8,000,000 × 8		8000 × 8000		8 × 8,000,000	
	Time	Eff	Time	Eff	Time	Eff
1	392	1.00	353	1.00	435	1.00
2	217	0.90	188	0.94	291	0.75
4	139	0.71	114	0.77	380	0.29

## Updates to $y$ use local storage

Threads	Matrix Order					
	8,000,000 × 8		8000 × 8000		8 × 8,000,000	
	Time	Eff	Time	Eff	Time	Eff
1	383	1.00	325	1.00	424	1.00
2	210	0.91	176	0.92	255	0.83
4	138	0.69	111	0.73	236	0.45

Times are in milliseconds. Code was compiled with optimization `-O3` and run on a cluster node.