



Figure 1: Execution time of single-threaded CPU vs GPU matrix multiplication (log scale Y-axis)

Matrix Size ($n \times n$)	CPU Time (ms)	GPU Time (ms)	Speedup (GPU/CPU)
32×32	0.068705	0.615584	11.970438
64×64	0.285104	4.249685	15.554119
128×128	2.751817	28.923530	11.419879
256×256	20.706290	287.933700	13.906730
512×512	198.716200	2446.466000	12.323010
1024×1024	3356.762000	46097.410000	13.745850