

GPU Vector Addition Performance Report

Experiment: CPU vs GPU vector addition using NumPy and CuPy

Observation: GPU acceleration does not outperform CPU for moderate vector sizes.

Reason: kernel launch overhead and host-device memory transfer dominate computation.

Conclusion: GPUs provide benefits when workload size is large enough to amortize overhead.

GPU Environment:

GPU metadata not found.

Unit Test Verification:

Could not run unit tests: [Errno 2] No such file or directory: 'pytest'