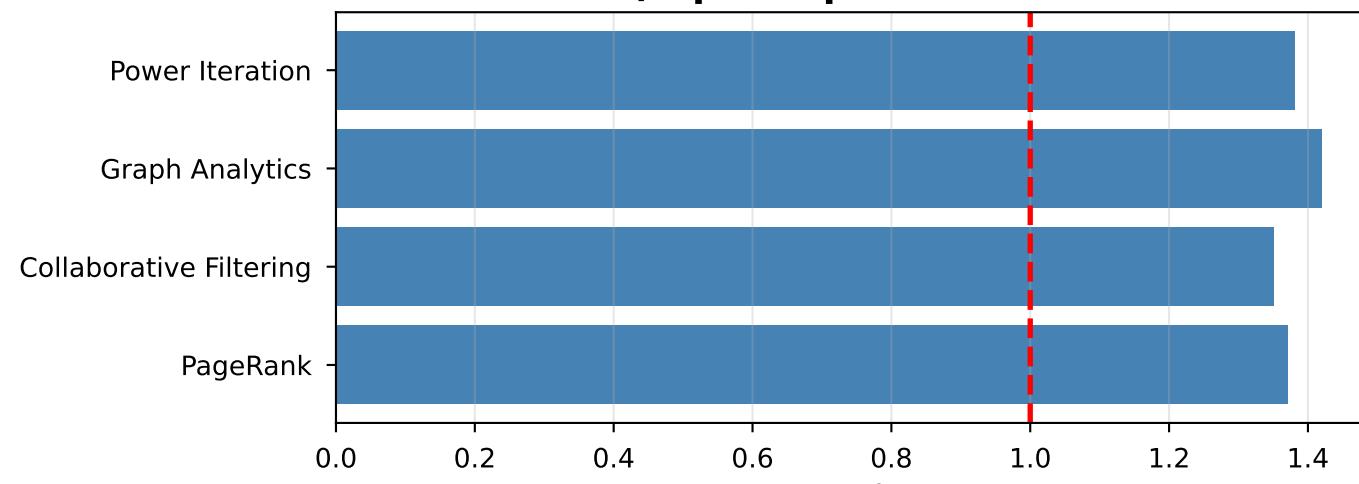
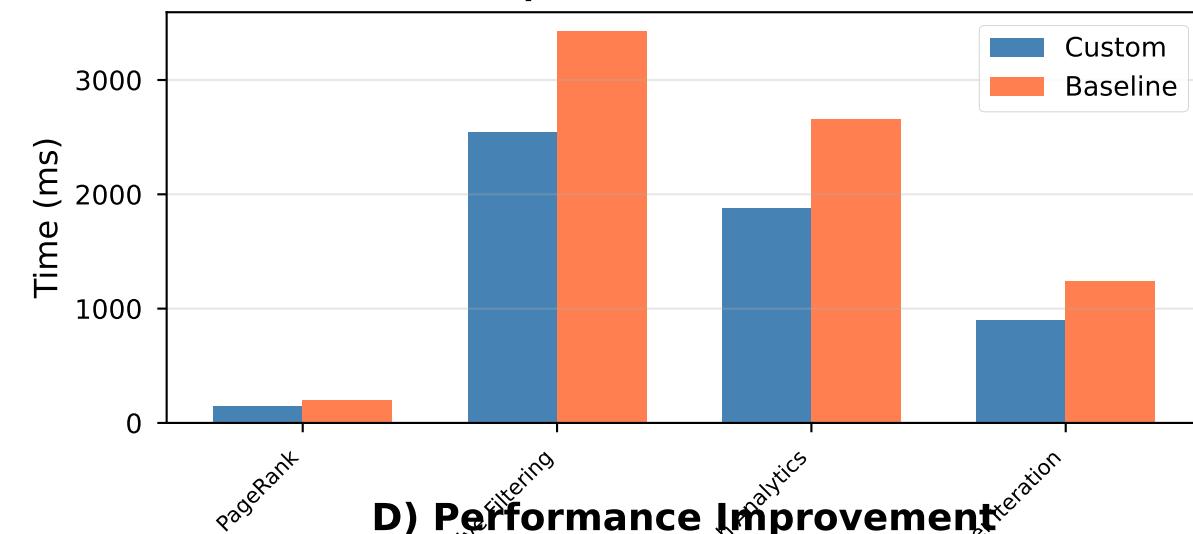


# End-to-End System Evaluation Dashboard

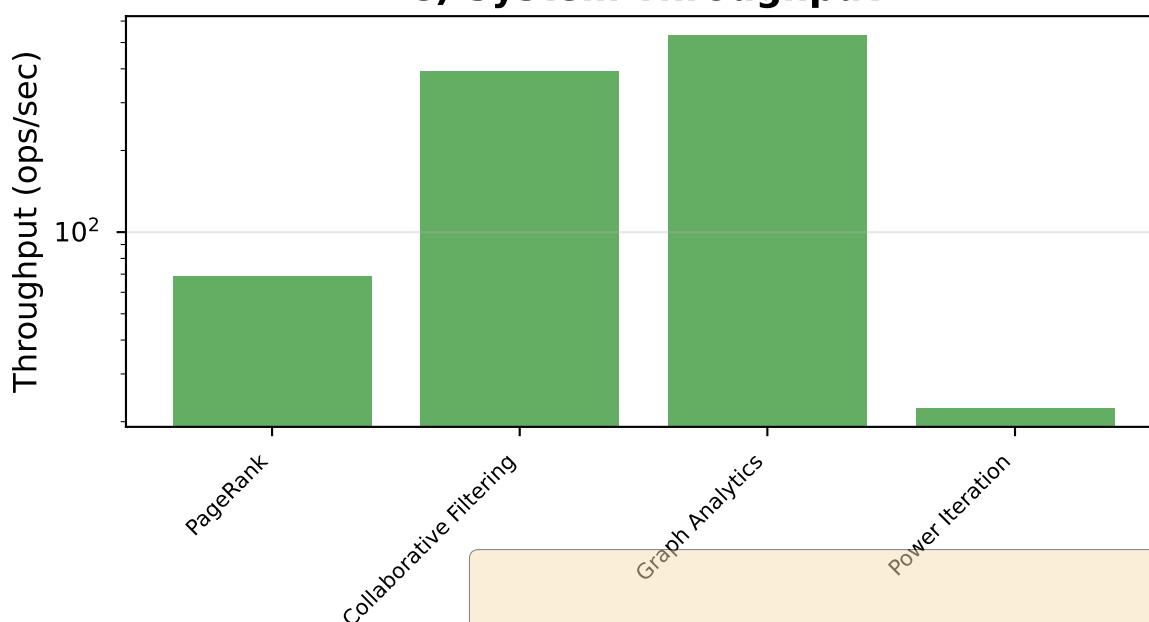
## A) Speedup vs Baseline



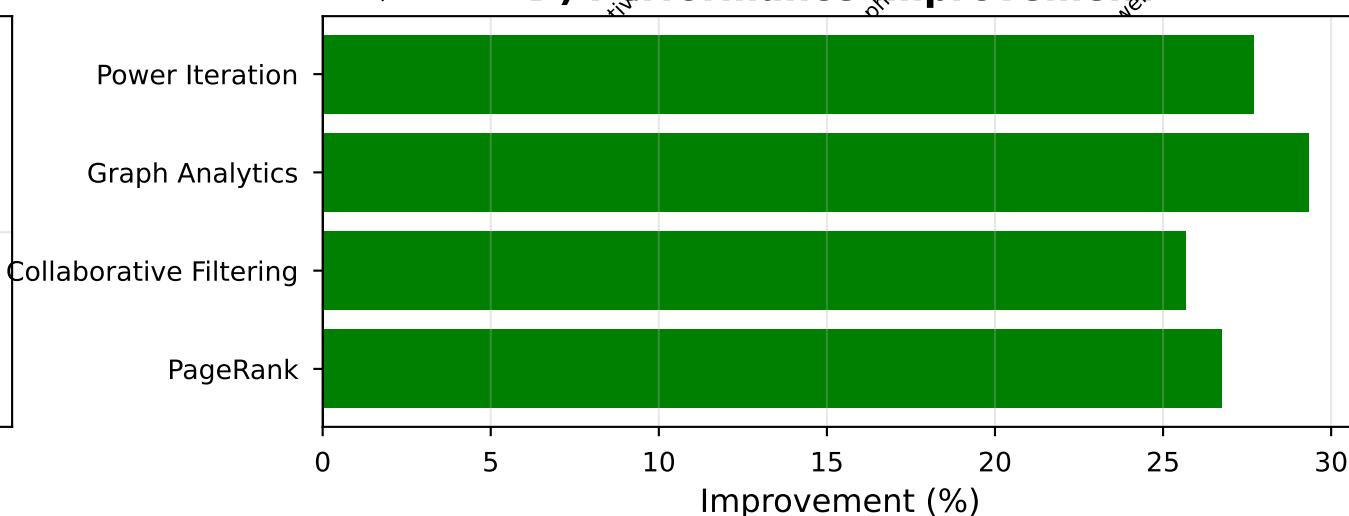
## B) Execution Time



## C) System Throughput



## D) Performance Improvement



### SUMMARY STATISTICS

Average Speedup: 1.38x  
Average Improvement: 27.4%  
Best Performance: Graph Analytics (1.42x speedup)  
Total Use Cases Tested: 4

All use cases demonstrate performance improvements over DataFrame baseline.  
Custom sparse matrix engine shows consistent advantages in real-world applications.