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CPSC 4780

Part 4 of HW 1

This is a screenshot of the results my answers are based off.

A computer screen with white text

Description automatically generated  
  
4. Analyze the performance results in a few sentences.

• Which one runs faster?

• What’s the reason for that? Problem size, overhead, etc.

Answer:

The CPU runs faster than the GPU in this dot product operation. The overhead from memory management and data transfer dominates the GPU computation time, making the CPU the faster option for this operation. For the GPU to outperform the CPU, the problem size would need to be larger, and memory allocation should be managed more efficiently.