

Presentation Outline

Report

Introduction:

Group Members Intro

- Jake/Nicholas/Garrett

Project Description

- VERY Basic: General Purpose of the project
 - GPU vs CPU performance
- Group Roles
 - Initial planned roles
 - Expand on how those evolved and what each team member ended up doing

Overview:

More In Depth Project Overview

- Project Synopsis
- Reasoning behind choosing this project
 - CPU will outperform GPU etc
- Specs we tested metrics on (Garrett's CPU/GPU)
 - Maybe address Nvidia/CUDA libraries
- Programs used in testing
 - Knapsack etc
 - Why these programs
 - only if there were specific reasons that weren't convenience
- Hypothesis for findings

Project Methodology

- Started by rewriting programs to work with CUDA library
 - knapsack/matrixMult
 - Coding process: specific changes made
 - Issues/challenges in rewriting
- Next gathered performance data
 - Operations used
 - perf etc...
 - Relevant useful data
 - Execution time
 - Clock cycles

- etc...
 - Issues/challenges in data collection
- Next evaluated collected data
 - Relevant metrics/arithmetic
 - CPI
 - Clock Rate
 - Memory usage
 - etc...
 - Analyzed Performance
 - Graphs for comparing performance

Results and Conclusion:

Results

- Show findings
- Show graphs
- Was our hypothesis accurate
- Any additional miscellaneous things we want to address

Conclusion

- Repeat (more briefly) project overview/purpose/results

Video

Introduction

Group Members Intro

- I'm Jake
- I'm Nicholas
- I'm Garrett

Project Overview

Project Synopsis (*Jake*)

- “Our project compares Nvidia GPU and CPU performance using programs rewritten to work with CUDA...”
- “Our hypothesis was that the GPU will outperform the CPU in every scenario...”

Project Methodology (*Nicholas*)

- “To achieve our project’s goals, we had to rewrite programs like knapsack to make them work with the Nvidia CUDA libraries...”

- “Next we gathered performance data using operations such as perf and time...”
- “Finally we employed arithmetic to find results such as CPI, Clock Rate...”

Project Results (Garrett)

- “Our results were thus...”
- “To conclude, our hypothesis was accurate; the GPU outperformed...”