

CS 385

Semester Project Proposal Guidelines

Prof. Dietrich

Proposal due Sep 26, 2008, 1pm

Abstract

This is a suggested "shell" for your proposal. Expected length is 2-4 pages long.

1 Project summary

Please provide a quick summary of your project here. Write two or three paragraphs explaining the high-level goals and objectives, similar to what you provided for the initial idea approval.

2 Motivation for the project

Expand here on the previous section, providing more detail on why this problem is interesting, while citing previous work and implementations. Point out the algorithmic focus, and provide a comparison between CPU and GPU.

3 Approach

How you plan to approach the problem. What algorithm(s) and what types of data structures do you plan on using? This should be a longish section.

3.1 Quick summary of CUDA

Provide some deeper background on CUDA and the GPU, from www.nvidia.com/cuda and www.gpgpu.org. Remember that the code will have to run on the reference host for project evaluation. In the meantime, developing and testing on a host capable of running CUDA in emulation mode (look it up) is acceptable.

4 Expected outcomes/deliverables

State some primary and secondary outcomes, e.g. what you will achieve by the end, and what you would like to achieve beyond the initial focus, given solid progress.

This should include, but is not limited to:

- The comparison of the implementation of the algorithm(s) for both the CPU and GPU, and where your contribution fits in. Also a complexity analysis of the algorithm(s) in question.
- The implementation of the code, in C and CUDA.
- A report, including a progress report about halfway through.
- A presentation.

5 Division of labor

Clearly state how the work will be divided up fairly between the project partners, if applicable. If working alone, this is not necessary.

6 Timeline

Provide a timeline for the project, broken down by week up to Dec 1, the project due date.

7 Note

You will be evaluated based on the quality of your contribution: the code/algorithm(s), the report, and the presentation given about the project, as well as the peer review of the projects of your fellow students.

If you would like to learn to write the proposal or report in L^AT_EX₃, please check out www.tug.org and www.latex-project.org/guides.