Final Project Kickoff

Parallel Computer Architecture and Programming CMU 15-418/15-618, Fall 2016

A few more words on projects

Final project expectations

- Frequently asked questions:
 - Q. Do I need to do something that no one has done before?
- A. Nope. However I expect you to take on a challenge where I believe the answer should not be obvious to you based on what you've learned in the course so far.

Common Scenario: Student: "I am going to run a cat detector on 1M images from YouTube and parallelize it on a cluster." Professors: convince us why this is hard?

- Q. Can my project be a part of something bigger? (e.g., a project from my research lab)
- A. Absolutely. As long as you carve off a task that is clearly only being done you.
- Q. How much work is expected?
- A. Including the proposal period, the project is 6 weeks of the course. We are expecting proportional effort. (For example, we are expecting at least 2 class assignments worth of work.)
 - Q. What if I need special equipment?
- A. Contact the staff soon. We can help you find resources around CMU: high-core count machines, GPUs, Oculus Rifts, FPGAs, Raspberry Pi's, Tegra K1's, etc.

Final project expectations

- October 28th's lecture slot is devoted to project meetings
- Project proposals are due on October 31 (but you are welcome to submit early to get feedback... often we have to iterate)
- Project milestones due on November 21st
- The parallelism poster session is on Tuesday, Dec 13th during the final exam slot.
- Your grade is based on the technical quality of your work, your writeup, and your poster
- You are absolutely encouraged to design your own project
 - This is supposed to be fun (and challenging)

Proposal Expectations

More details will be available on the website

- What is the problem.
- Why is this hard?
- What is your goal?
 - How do we evaluate your success?
 - What is your goal if things go slowly?
 - What is your goal if things go faster?
- What is your schedule by week?