Parallel Prog w/CUDA,COMP_ENG_468-0_20: Massively Parallel Prog w/CUDA,COMP_SCI_368-0_1: Programming Massively Parallel,COMP_SCI_468-0_1: Programming Massively Parallel))

Student Report for Nikos Hardavellas (Massively Parallel Prog w/CUDA, Programming Massively Parallel (COMP ENG 368-0 20: Massively

ESSAY QUESTIONS

Please summarize your reaction to this course focusing on the aspects that were most important to you.

Comments

Pretty good class. I felt like some of the labs were unnecessarily complicated, throwing a few extra challenges beyond the basic understanding of what the lab is trying to teach which ended up making them a lot harder. But, at the end it helps you understand how to deal with those peculiarities so I'm not sure if that is necessarily a good or bad thing. Lectures felt really informative, and Nikos did a good job of responding to and encouraging questions.

Great!

For undergrads 90% of the entire grade was composed of 4 labs. The work load is absolutely manageable if you start early on every assignment. Prof is excellent and really made me enjoy going to lecture.

This was a good class overall. If you are interested in CUDA or GPUs, this would be a good class to take. At times instructions were vague, but overall the assignments helped promote learning. The majority of the lectures were quite helpful and a lot of really useful content and topics are covered for anyone interested in parallel programming, compute graphics, machine learning, etc.

This course is quite challenging if lack of experience in hardware and/or prallel programming. While what we learned is rewarding, it does requires some extra effort compared to other courses.

Fun class, relatively simple assignments.

Lectures and posted papers/websites cover the same material in slightly different ways which is nice. Interesting topics covered in the class.

368 section: This is one of those classes where you don't do anything for most of the quarter but you become SUPER busy with this class when one of the four labs is about to be due. Each lab was a double digit time commitment in terms of hours but besides for that, this class is really pretty chill. I do wish there were more office hours (only the TA had weekly scheduled OH; Nikos was by appointment). Oh also, the lectures aren't recorded.

I really liked this class. There were some topics that were covered that were somewhat mind boggling and a lot of the straight–forward concepts ended up giving me a headache when actually trying to write code, but I feel like everything covered was interesting regardless. I also just really like running code, making an optimization, and seeing numbers go down.

Learning theory about multithreaded programming in my youth made me doze off. This course though gets you programming superfast fundamental algorithms on a real Nvidia GPU, and in my lexicon, that is quite a powerful opportunity. Do you know how to launch threads on a GPU? You probably don't know how to do this seemingly simple task, and it turns out it really is simple, and the simplest way to learn is to take this course. Does the course content largely copy from slides Nvidia and other CS programs? Yes, but such is the world of academia, and you go to Northwestern anyway. Make the most out of it!

There were 4 labs for 368. The first 2 are okay and the last 2 focus on optimization. The assignments were difficult to get correct without the optimizations and there's only one official office hour.

You learn a lot about writing highly performant parallel code. There are no exams, only bi-weekly lab assignments. Good class.

Most important topics were parallelizing mostly CPU bound single-core workloads.

As a CS major, this course was enjoyable but challenging. At the end, I feel that I understand how to write efficient code for GPUs, which I had zero clue about at the start of the course. Lectures are informative though at times a bit dry. The labs are challenging.

Challenging homework but fun to work through. Lots of lower level programming. Homework doesnt cover a lot of the lecture topics. Lecture goes over a lot of topics that kinda get skimmed over, but a good overview of parallel programming and coding with cuda.