Current Course Load

Course Code	Course Name	Credits	Tag
CS 213 *	Data Structures and Algorithms	6.0	Additional Learning
CS 766	Analysis of Concurrent Programs	6.0	Additional Learning
EE 636	Matrix Computations	6.0	Additional Learning
ES 200	Environmental Studies: Science and Engineering	3.0	Core course
HS 200	Environmental Studies	3.0	Core course
ME 766	High Performance Scientific Computing	6.0	Additional Learning
PH 447	Physics Lab (Optics and Spectroscopy)	3.0	Additional Learning
PH 550	Soft Matter Physics	6.0	Additional Learning
PH 574	Physics of Semiconductor Devices	6.0	Core course

Aspirations

The kind of work (link) that I hope to pursue in the coming years, or perhaps something more specialized like complexity theory, computational mechanics or quantum complexity

The following is a list of books that I am currently working through

- Computer Systems: A Programmer's Perspective (Bryant, O'Hallaron) [20% complete] (CS:APP)
- Programming Massively Parallel Processors (Kirk, Hwu) [15% complete]
- Extreme C (Amini) [55% complete]
- Introduction to Parallel Programming (Pacheco) [25% complete]

Am yet to start the lab assignments for CS:APP. They seem pretty cool, e.g. some of their labs require the student to reverse engineer binaries. I am still learning the ropes, like using readelf and objdump, and understanding x86-64 assembly and the ELF binary file format. I might have been inspired by this course, so working towards its prerequisites.

I understand that theory and textbook problems alone are not enough, and that I must get some project work under my belt if I am to produce any meaningful academic work. I am hoping that the projects that I get to pursue in the courses this semester will partially fulfill this. Other than this I am seeing whether I can continue my BTP 1, which was more physics oriented, along the direction of computational science. I anticipate that my guide will require me to look for a co-guide from a different department when I hear back from him.

Otherwise, I am actively seeking project opportunities and would like to get a chance in the CSE department. I realize that all of this sounds very naive, but I do not know why I got hooked to these self studies of mine, which led me to practically abandon theoretical physics for a good few months. All I know is that there is nothing else that I would rather be doing.

Appendix/Post Script

1. My notes for this course thus far (see main.pdf), as an example of my approach towards this course. These were taken during the lecture, made possible by Vim+UltiSnips+vimtex+Zathura+SyncTeX. Figures made using Xournal, but I will switch to Inkscape from next lecture onwards, because vector graphics would be more convenient.
2. I imagine that people in the CSE department have more efficient setups using custom scripts on their Linux machines. Is it fine if people share them on Piazza?