



DEPARTMENT OF PHYSICS

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Dear Jayda, De'Shayla, and Hillary:

I am so please and excited to hear from you girls. Well, as you already may know, my name is Terrina L. Smith and I am a full-time student here at Illinois State University (ISU). First, I would like to share my educational background and goals, ambitions, and aspirations. I hold an Associate in Science, an Associate in Arts, and a Basic Certificate in Accounting from Richland Land Community College (Illinois). I am currently pursuing a Bachelor of Science in Computer Physics at ISU. Thereafter, my plan is to pursue graduate studies in engineering and science at Mason University (Maryland) or Tuskegee University (Alabama).

Now, in response to your questions like, "What is computer physics and what is it like majoring in this particular field of science?" First, computer physics refers to the use of computers to solve physics and engineering problems. Computer physicists sometime referred as computational physicist, use high-performance computers to explore physical phenomena—from those involving the most fundamental object such as quarks and black holes to important applied physics and engineering problems like nanotechnology, weather prediction, medical technology, and environmental cleanup. This new approach to physics opens avenues to problems whose solution is otherwise impossible. Therefore, computer physics it somewhat entertaining because it is like being in a magical world that is filled with exciting unknown discoveries. It is a mind-boggling experience to have an exciting opportunity to explore and to learn something new everyday in the world of physics. It is very rewarding.

As a computational physics major, it takes a lot of hard work, dedication, and perseverance to succeed in this field of science. To begin with, you have to complete math courses such as algebra, geometry, trigonometry, finite, poly calculus, calculus, differential equations, and probability and statistics. Keep in mind that the more math courses you take, the better mathematical foundation you will have to be able to solve model-problems. In addition, you have to take chemistry and just for fun you can take an astronomy class. Last and more importantly, it is required that you take courses in computer-science and physics. As I stated earlier, this course load is hard work and extremely time-consuming. But let me make a basis for pursuing computer physics—if this is something you truly want to do, just remember, "*I Can Do All Things Through Christ Who Strengthens Me.*" The reason why I stress this quote is because someday I pray that my dream become a reality for the simple fact that I have relatives who are victims of *Hurricane Katrina*—my ultimate goal is to help rebuild *New Orleans* so my relatives and other displaced U.S. Citizens can return to the City as they know as *home*. I am extremely dedicated and determined to succeed because we all know that it is those things that give us the most reward in life, are those things that we work hard at—there is great victory in the struggle.

As far as building a Web-Site, I have taken two courses: ITK-160 Foundations of Information Technology and Eng-149 Technical Writing. In the ITK-160, we used HTML (HyperText Markup Language) which is the predominant markup language for the creation of web pages. In Eng-149, we used Firefox software, which is a web developer—both are not that difficult use. In fact, the both software's are pretty fun to use once you get the hang of it. At the same time, it can be a tedious job depending on the size of the Web-Site you want to build.

Work requires a great balance in time management. I work in the Physics Department here at ISU as an Undergraduate Teaching Assistant. In addition, I am a research assistant for Dr. Shang-Fen Ren and I am a co-Workshop Leader presenter at the Expanding Your Horizons through Math, Science, and Technology Conference, which is held at ISU. I also plan to apply for an internship at Archer Daniels Midland or Caterpillar, Inc.

Well girls, I hope I have enlightened you on Computational Physics. I hope we have a chance to meet and I wish you many blessings in your future endeavors.

Sincerely,

A handwritten signature in black ink that reads 'Terrina L. Smith'.

Terrina L. Smith

Computer Physics Major/Illinois State University