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CSCI 365

1. I do think that python is a good choice for CSCI 160/130 in general. It is a good and easy way to learn the basics of computer science without having to delve into topics concerning memory allocation and various other language niches such as C. Python is a good way to learn the basic variable declaration, for loops, while loops etc. Java would be my second choice because it is such a widely used language in the CS world I believe. The feature that I don’t like about my choice is that python takes care of so much of the background work that when a student is thrust into a language such as C it can be overwhelming with pointers, memory allocation and object creations in a tougher topic such as systems programming where threads and processes are introduced.
2. I think really the biggest obstacle to the CS 160 course whether it is here or at another university is the steep learning curve. By this I mean that no matter what language you take or teach it all begins with understanding the basics with how we communicate the computer as well as the logic of how programming languages are set up and run in order to solve a problem.
3. I have mixed feelings on this question. On one hand it is nice to learn a bit of the more complicated algorithms and processes on the same language two semesters in a row because I think that once you get comfortable with one language enough with the easy things it is more easily transferrable to any language. Plus, I do think that it would be good for the people coming in from 130 who are taught in C to be on the same page as the 160 students coming in where both streams of students are learning a different language in the beginning of the semester. When I got to 161 the first half of the semester was spent learning the basics of python for the 130 students. This time could be better spent learning a new language’s syntax for both the 130 and 160 students. On the other hand I could see going from python in 160 to maybe a language more like java in the 161 course being useful. I say this because it would be a good stepping stone to move to java and then because the next step for CS students is 230 which is taught in C. Switching languages early may be a good thing for CS students teaching them that the meat and potatoes is not about learning just one language really well it is that all CS at its’ core is the same and can be done one way or another in any language.
4. I used to think that python was my favorite because it is what I learned in the beginning but, I do think my perspective has changed a bit in the past semester or so. I now call it my “native language”, in the fact that it is my basis for comparison to learn a new language. At the moment I do not have a favorite language because what I have learned is that I can pick up a language relatively quickly now because my foundation has been laid down at this point. Different languages are good for different projects and uses. I like PERL for database and CGI because it is really good for that situation. I like python for learning more complex topics because it is what I am most comfortable in and know more of the syntax. I am just picking up java for a different course now and I am picking it up relatively quickly, again because the foundation has been laid. So I do believe the CS program is accomplishing its goal of creating a computer scientist where the specific language does not necessarily matter but the knowledge in the topics is key.