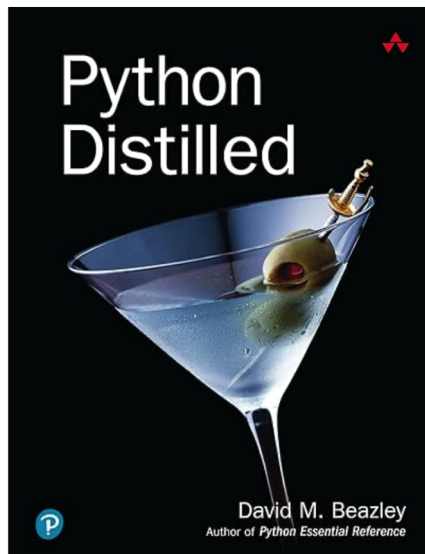


Python vs. Mathematica (a plug for what you have been learning)

<begin-rant>

Looking at the bit of algebra on the previous page that Mathematica did for us, I am reminded why I taught this course in Mathematica, not Python. Yes, you can make these things happen in a Jupyter notebook, but it is grossly clumsier. Python has been trying to graft symbolic manipulation into its arsenal of tools, but Mathematica is symbolic at its most basic level, and it does algebra easily and elegantly.

At some point you will probably have to learn Python to work with a team. You now know enough software development techniques that you do not need to sign up for a Python course. Instead, grab this book and teach yourself Python:



It is another language, and it will take you months, just like learning Mathematica took you months, but you are now sophisticated enough that you don't need another course.

The one area in which you have no sophistication yet is object-oriented programming. If you wanted to take another computer science course, you could take a 200-level course titled something like "Object-Oriented Programming in Java." Java is a premier object-oriented language, but Python has also grafted objects into its ever-enlarging hodge-podge of methodologies, so it might be titled "Object-Oriented Programming in Python" and before you begin the course, they would expect you to have learned all the basics of Python.

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