Numpy

Numerical Computing in Python

This Lecture

You got numbers? We got python.

Before we start...

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1. Assignment tomorrow.

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2. Say hello to the mod(s).

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3. Quick web-scraping demo

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4. Do the parts you can as we progress.

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3. They'll answer questions in chat, but will interrupt me if it needs my attention.
4. If it's on-topic, urgent, and requires my attention, you should still feel free to interrupt me.

Quick web-scraping demo

To the Notebook.

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4. various analysis and ML libraries

The domain of Numpy

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1. Provides many of the basic functions: iteration, Fourier, PRNGs, etc.
2. Has well-understood ‘escape hatches’ for when you want to use functionality implemented in a different language.
3. Many of the other libraries we will use this semester work with Numpy objects out of the box.

Main thing

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1. Fixed size (pros/cons?)
2. Homogeneous (pros/cons?)
3. Heavily optimized

Other things

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1. Many integer types (`intc`, `int{8|16|32|64}`, `float{16|32|64}`, complex numbers, booleans, and more!

To the Notebook!

What the title says.

Thanks for your time!