Python Fundamentals & Numpy

"Back to square *zero*"

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Let's Talk Python

Python is interpreted

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Python is interpreted, high-level

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Python is interpreted, high-level, dynamically typed

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Python is interpreted, high-level, dynamically typed & garbage collected.

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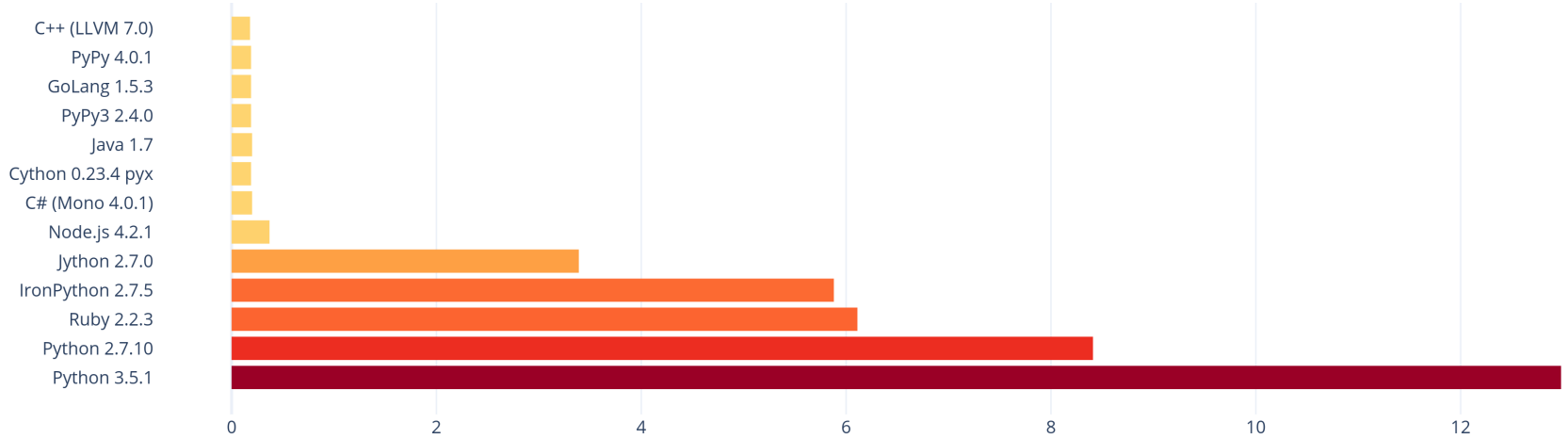
Pretty awesome, yeah?

Why Numpy

Well, it's *very* slow.



Time(s) to complete BuildBridge with D=9, L=1

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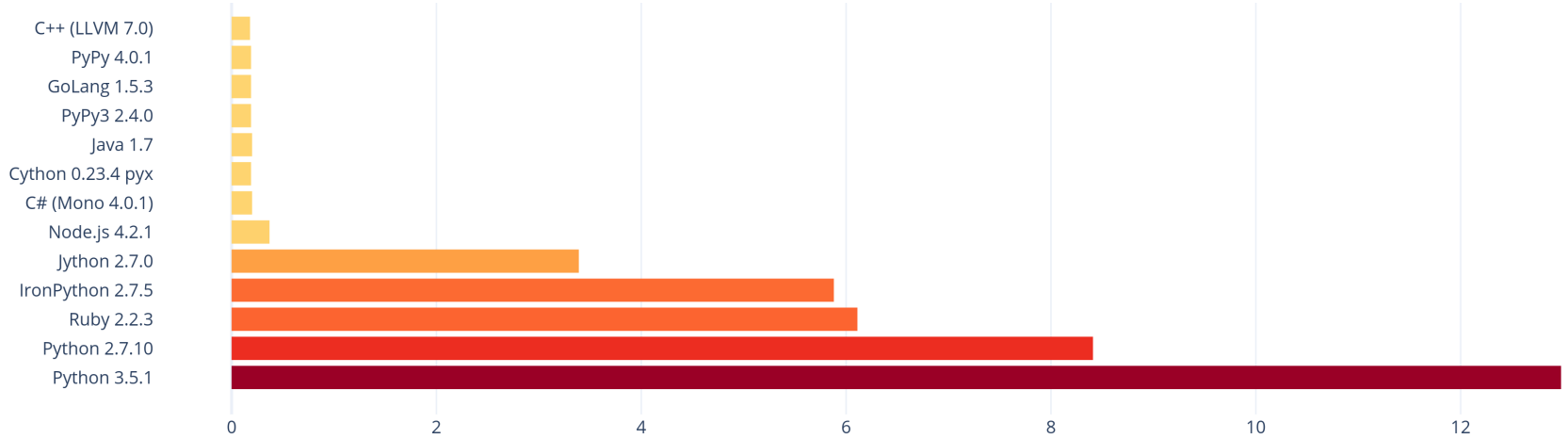

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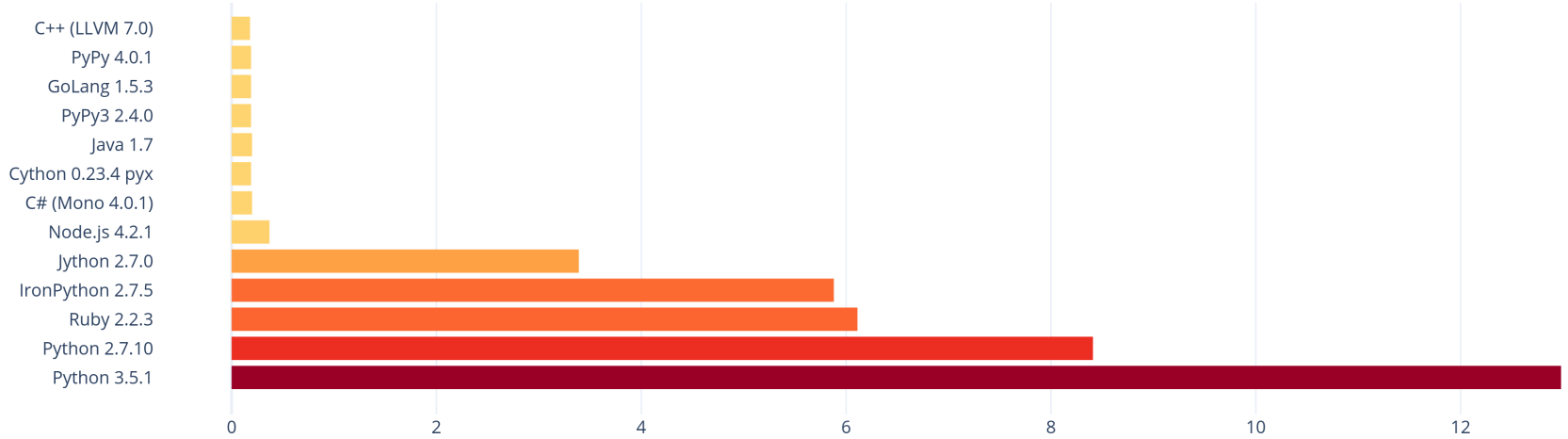

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Python is very easy to work with. C, C++ are fast but unintuitive.

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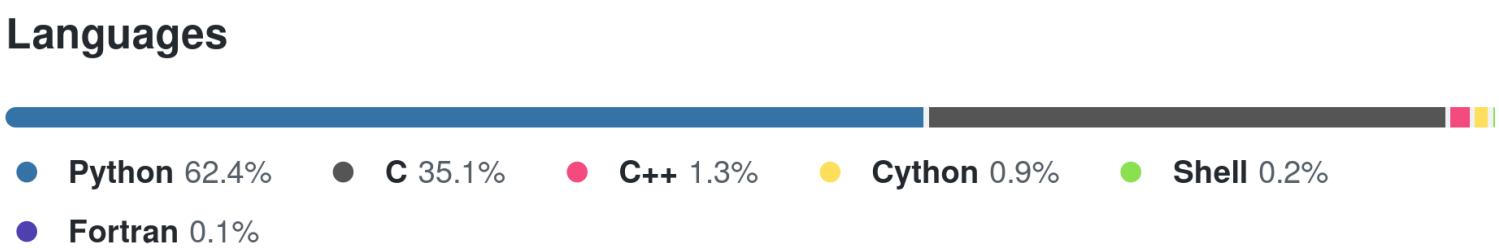
Enter NumPy:



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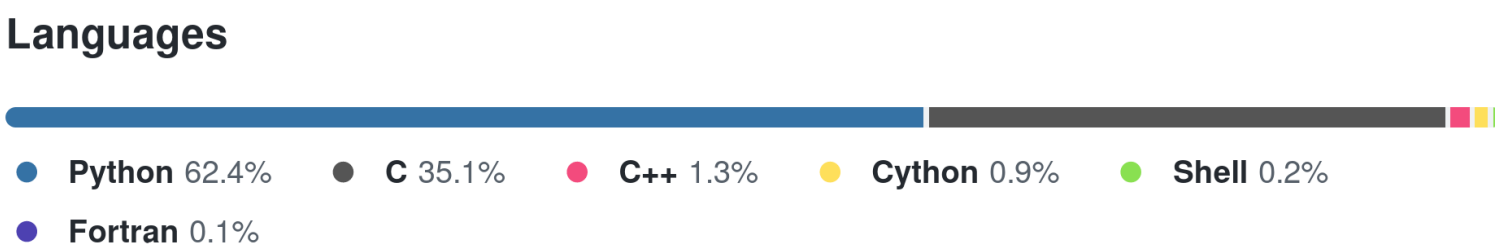

By effectively using Python as a *wrapper*, we delegate compute-intensive tasks to LLVM infrastructure, while maintining ease-of-use.

Voilà; best of both worlds.

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Categorizing Popular Learning Methods

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Thank you!

Have an awesome rest of your day!

Slides:

`https://cs.purdue.edu/homes/jsetpal/slides/python-numpy.pdf`