Python for Data Science

Giulio Rossetti, EUI, Firenze 1-2 February 2018

How many people here know a programming language?

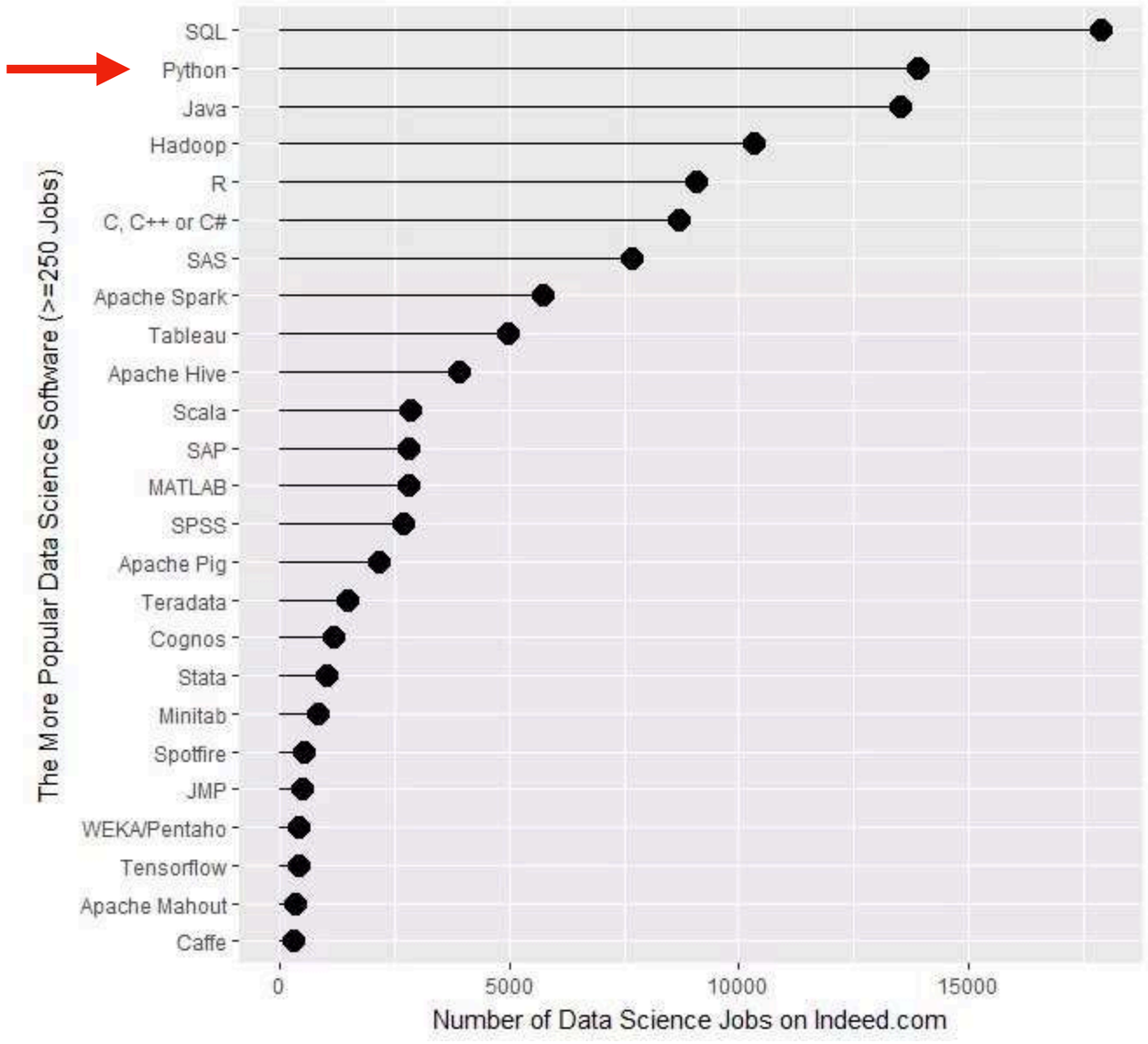
How many people here know a programming language?

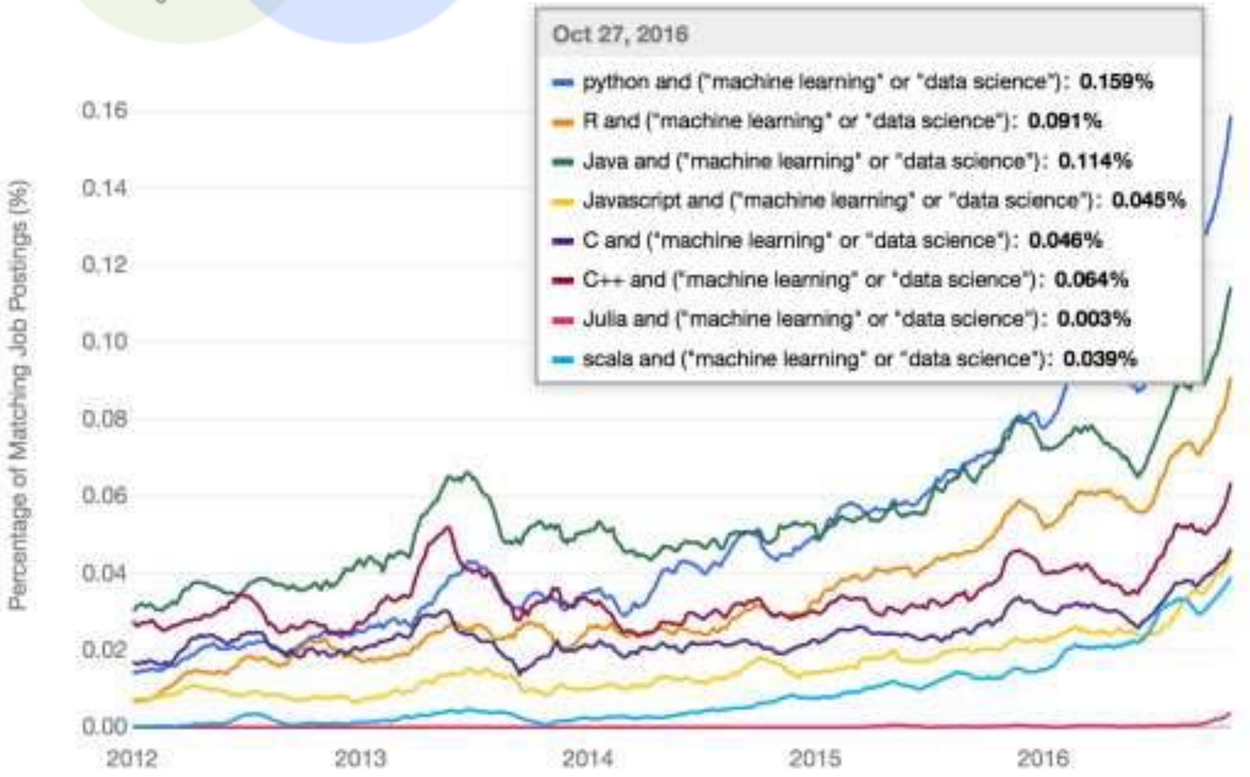
How many people here have used Python?

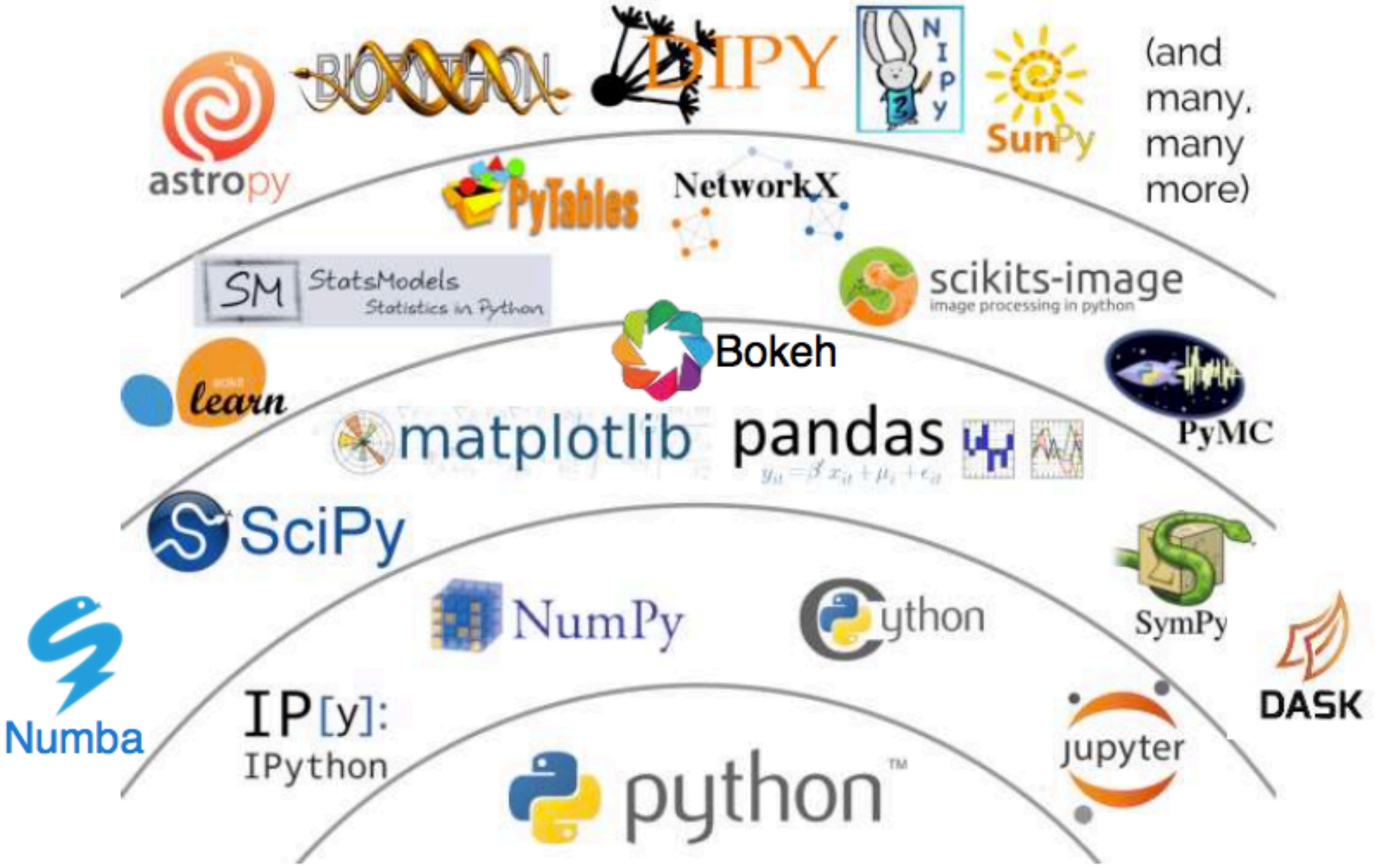
Python is a general-purpose language,
it can be used to build just about anything!

Documentation, tutorials available at:
www.python.org

Data Science is growing with Python leading the way



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(and many, many more)
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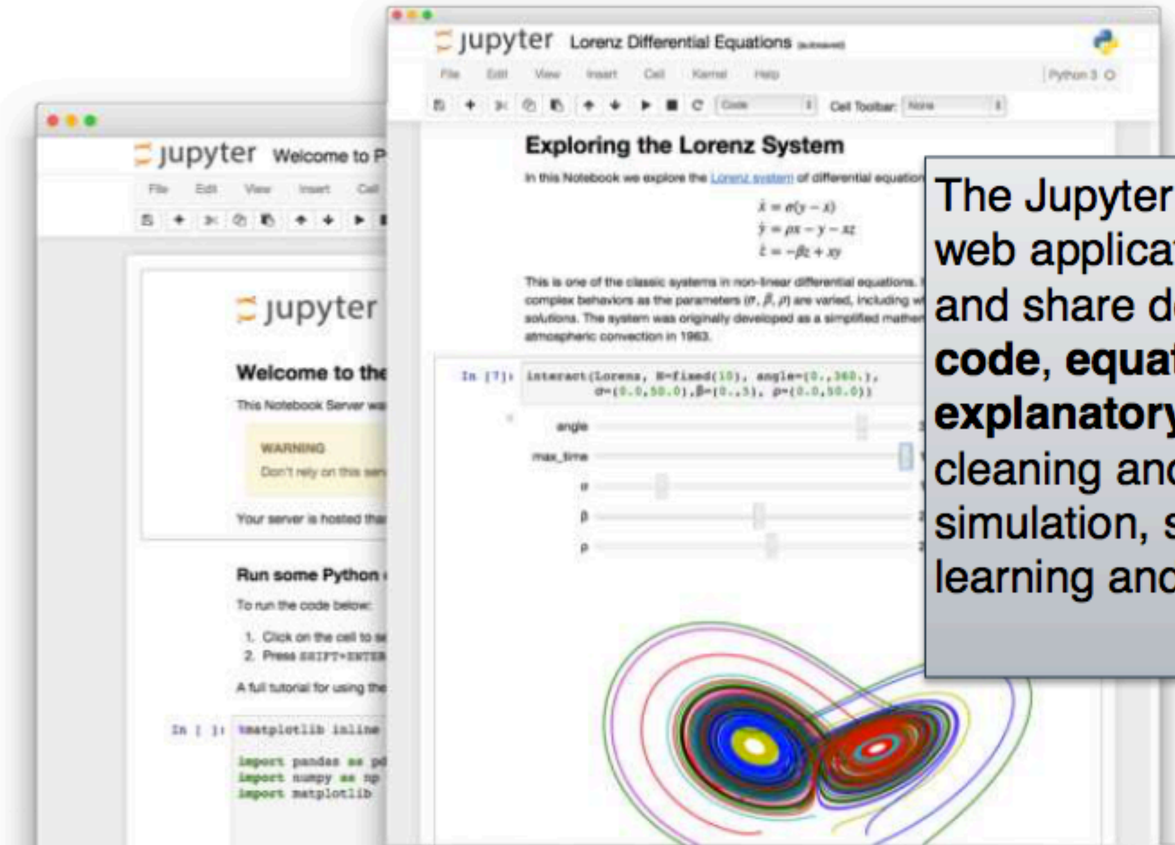
Course organisation and materials

This course will be completely hands-on!

To do so we will use Jupyter notebooks
(available within Anaconda)

Notebooks allow to:

- *Interactively* execute Python code
- Visualise results *step-by-step*



The Jupyter Notebook is an open-source web application that allows you to create and share documents that contain live **code**, **equations**, **visualizations** and **explanatory text**. Uses include: data cleaning and transformation, numerical simulation, statistical modeling, machine learning and much more.

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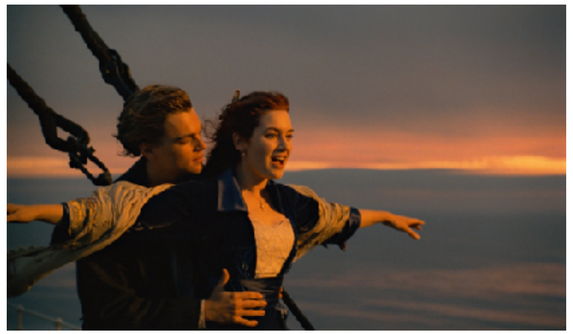
Session 3: Case Study

Who is more likely to survive to the infamous Titanic shipwreck?



Let’s begin!

Install **Anaconda**
(Python 3 version!)
https://www.anaconda.com/download/

Anaconda is a python distribution for data scientists.

It provides out-of-the box support for:

- Data modeling
- Analysis
- Visualisation
- …