

GETTING STARTED WITH PYTHON





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Try the following five steps outlined on the next slides.

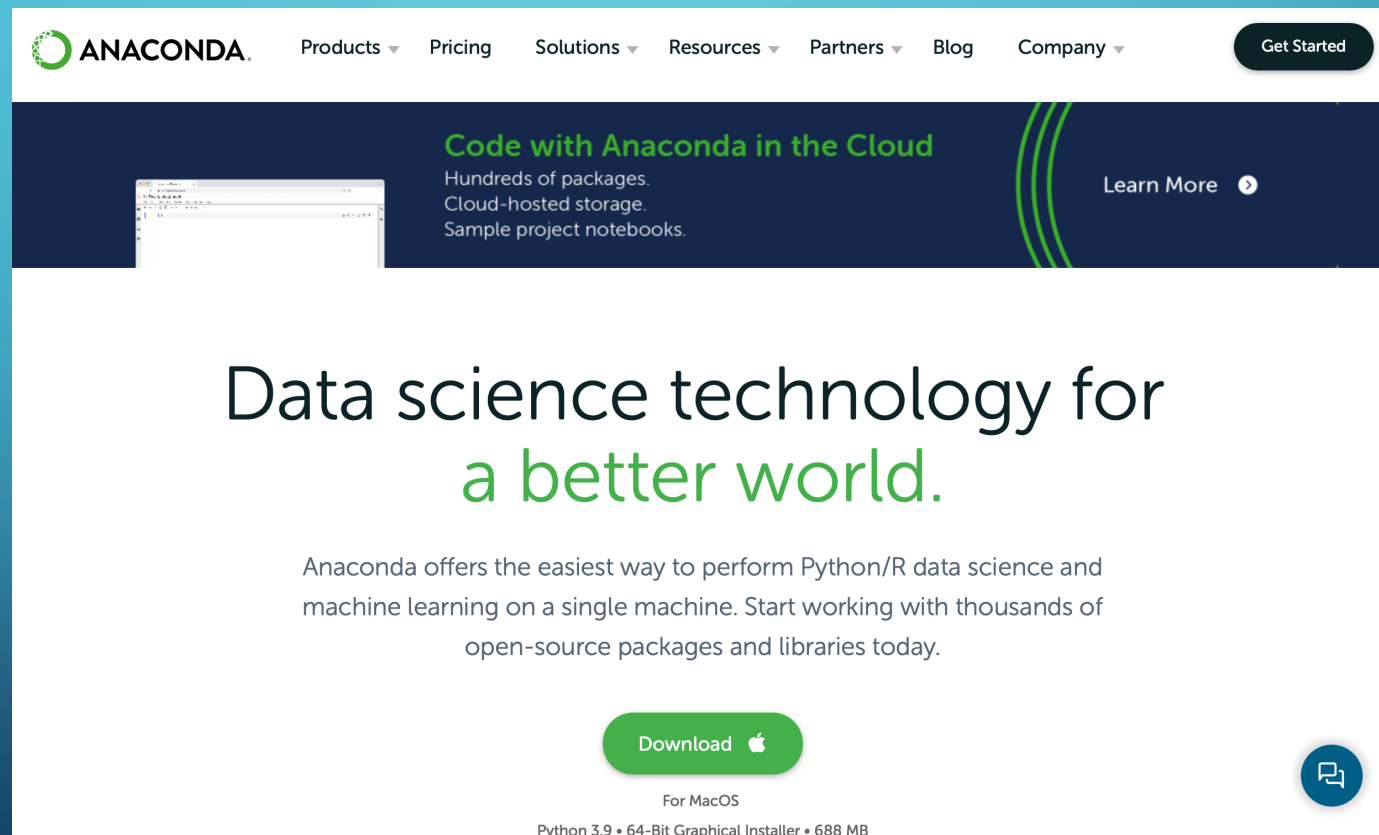
If you have trouble with the installation or launching/using JupyterLab please attend the drop-in help sessions on Zoom:

January 13, 1:30-3:30pm (ID: 890 8158 6249, code: 228693)

January 20, 1:30-3:30pm (ID: 842 5297 1979, code: 679904)

1. DOWNLOAD ANACONDA

<https://www.anaconda.com>




The screenshot shows the Anaconda website homepage. At the top is a navigation bar with the Anaconda logo, links for Products, Pricing, Solutions, Resources, Partners, Blog, and Company, and a 'Get Started' button. Below the navigation bar is a dark blue banner with the text 'Code with Anaconda in the Cloud' and a 'Learn More' link. The main content area features the headline 'Data science technology for a better world.' and a paragraph about Anaconda's ease of use for Python/R data science and machine learning. A 'Download' button for macOS is prominently displayed, with additional text below it specifying 'Python 3.9 • 64-Bit Graphical Installer • 688 MB'. A small icon in the bottom right corner represents a document or notebook.

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Code with Anaconda in the Cloud
Hundreds of packages.
Cloud-hosted storage.
Sample project notebooks. [Learn More](#) ➤

**Data science technology for
a better world.**

Anaconda offers the easiest way to perform Python/R data science and machine learning on a single machine. Start working with thousands of open-source packages and libraries today.

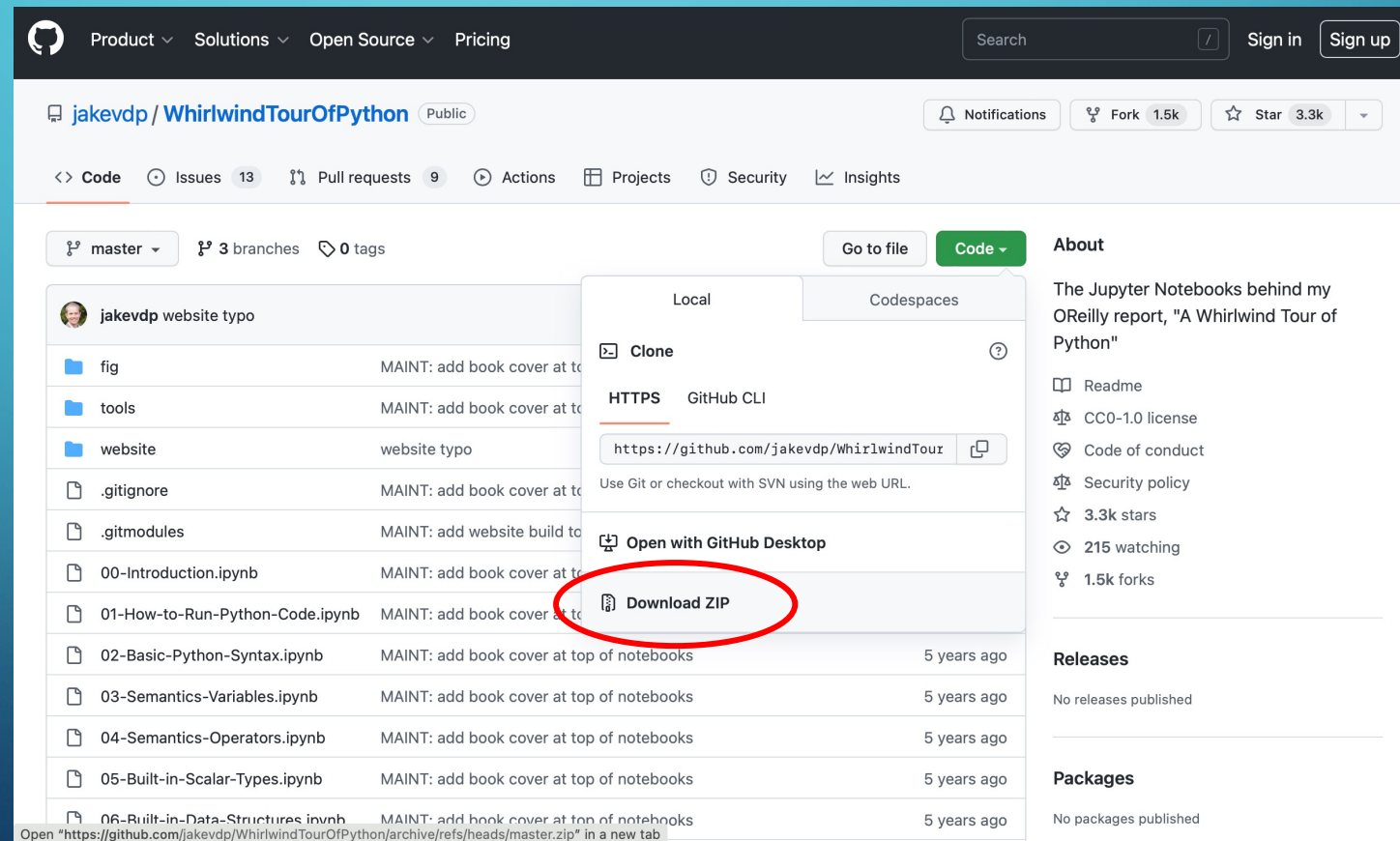
[Download](#) 

For MacOS
Python 3.9 • 64-Bit Graphical Installer • 688 MB

2. DOWNLOAD WHIRLWIND TOUR OF PYTHON

<https://jakevdp.github.io/WhirlwindTourOfPython/>

<https://github.com/jakevdp/WhirlwindTourOfPython>



The screenshot shows the GitHub repository page for `jakevdp/WhirlwindTourOfPython`. The repository is public and has 3.3k stars and 1.5k forks. The 'Code' tab is selected, showing a list of files and folders. A dropdown menu is open, showing options to clone the repository using HTTPS or GitHub CLI, or to open it with GitHub Desktop. The 'Download ZIP' option is circled in red.

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jakevdp / WhirlwindTourOfPython Public

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Code Issues 13 Pull requests 9 Actions Projects Security Insights

master 3 branches 0 tags

Go to file Code

About

The Jupyter Notebooks behind my O'Reilly report, "A Whirlwind Tour of Python"

Readme CC0-1.0 license Code of conduct Security policy 3.3k stars 215 watching 1.5k forks

Releases

No releases published

Packages

No packages published

fig MAINT: add book cover at top of notebooks

tools MAINT: add book cover at top of notebooks

website website typo

.gitignore MAINT: add book cover at top of notebooks

.gitmodules MAINT: add website build to top of notebooks

00-Introduction.ipynb MAINT: add book cover at top of notebooks

01-How-to-Run-Python-Code.ipynb MAINT: add book cover at top of notebooks

02-Basic-Python-Syntax.ipynb MAINT: add book cover at top of notebooks 5 years ago

03-Semantics-Variables.ipynb MAINT: add book cover at top of notebooks 5 years ago

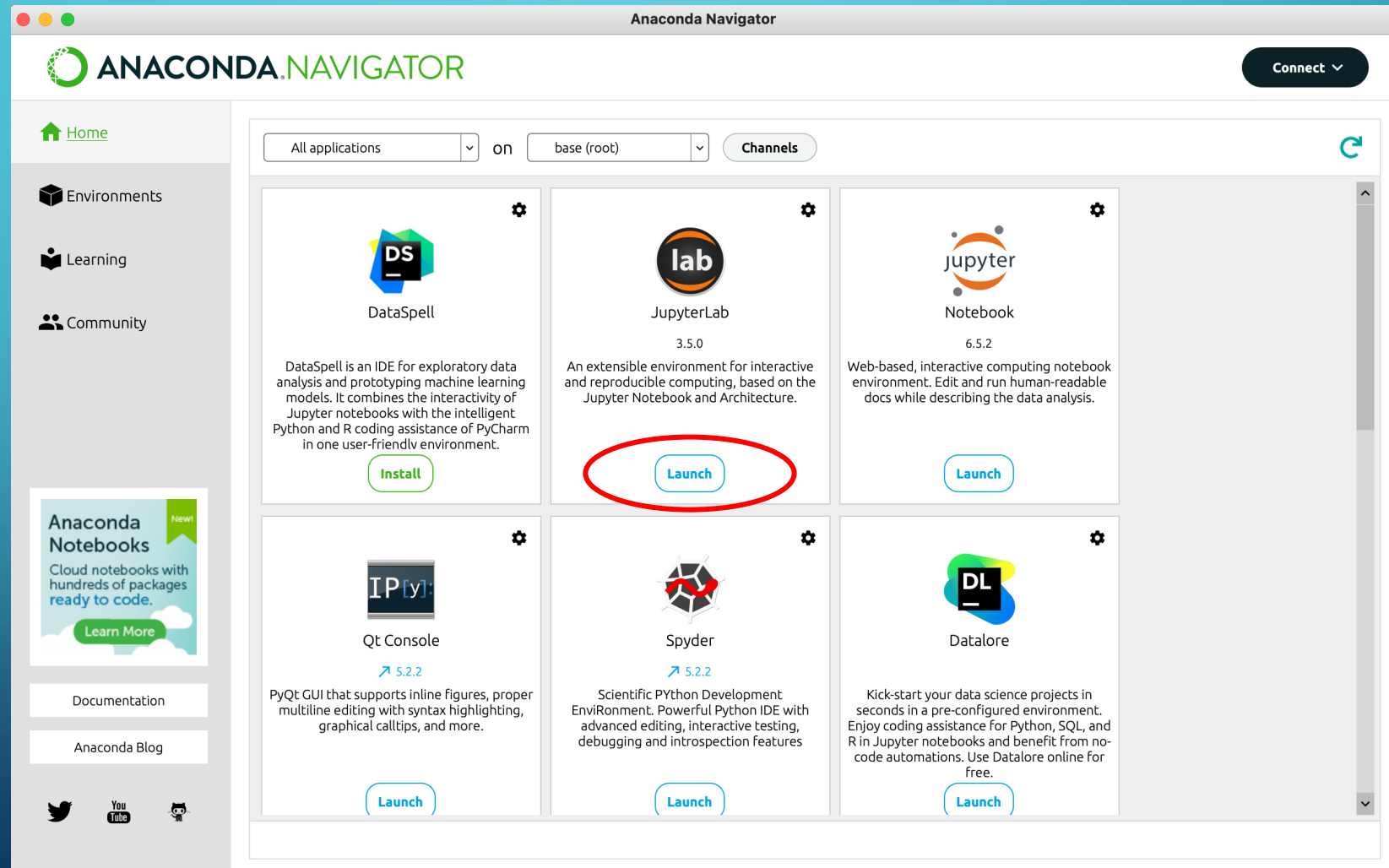
04-Semantics-Operators.ipynb MAINT: add book cover at top of notebooks 5 years ago

05-Built-in-Scalar-Types.ipynb MAINT: add book cover at top of notebooks 5 years ago

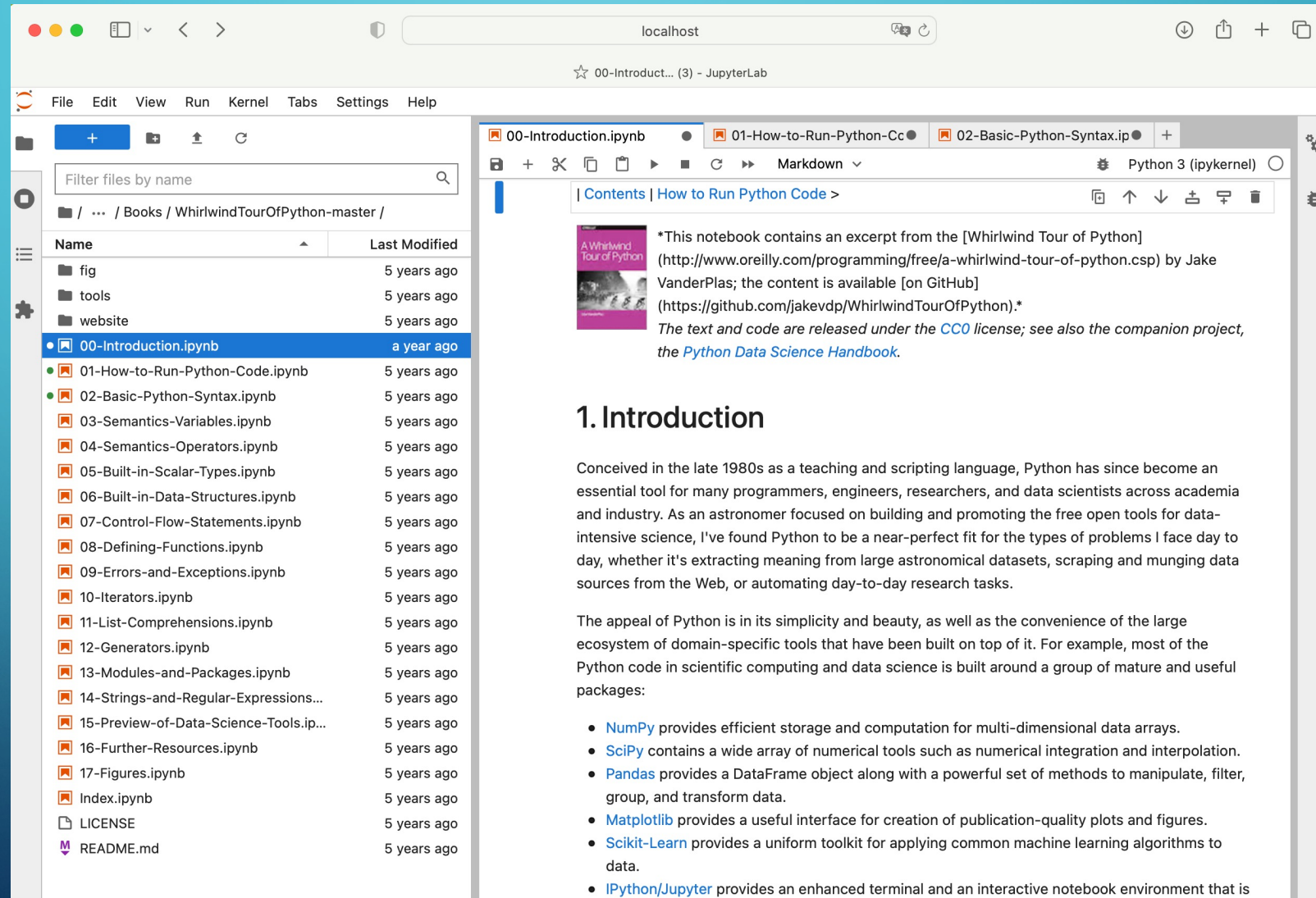
06-Built-in-Data-Structures.ipynb MAINT: add book cover at top of notebooks 5 years ago

Open "https://github.com/jakevdp/WhirlwindTourOfPython/archive/refs/heads/master.zip" in a new tab

3. OPEN ANACONDA-NAVIGATOR / LAUNCH JUPYTER LAB



4. OPEN WHIRLWIND TOUR OF PYTHON



The screenshot shows a JupyterLab interface. On the left is a file browser pane showing a directory structure: `Books / WhirlwindTourOfPython-master /`. It contains a table of files:

Name	Last Modified
fig	5 years ago
tools	5 years ago
website	5 years ago
00-Introduction.ipynb	a year ago
01-How-to-Run-Python-Code.ipynb	5 years ago
02-Basic-Python-Syntax.ipynb	5 years ago
03-Semantics-Variables.ipynb	5 years ago
04-Semantics-Operators.ipynb	5 years ago
05-Built-in-Scalar-Types.ipynb	5 years ago
06-Built-in-Data-Structures.ipynb	5 years ago
07-Control-Flow-Statements.ipynb	5 years ago
08-Defining-Functions.ipynb	5 years ago
09-Errors-and-Exceptions.ipynb	5 years ago
10-Iterators.ipynb	5 years ago
11-List-Comprehensions.ipynb	5 years ago
12-Generators.ipynb	5 years ago
13-Modules-and-Packages.ipynb	5 years ago
14-Strings-and-Regular-Expressions...	5 years ago
15-Preview-of-Data-Science-Tools.ip...	5 years ago
16-Further-Resources.ipynb	5 years ago
17-Figures.ipynb	5 years ago
Index.ipynb	5 years ago
LICENSE	5 years ago
README.md	5 years ago

The main pane shows the '00-Introduction.ipynb' notebook. It has a 'Contents' tab selected, showing the following text:

This notebook contains an excerpt from the [Whirlwind Tour of Python] (<http://www.oreilly.com/programming/free/a-whirlwind-tour-of-python.csp>) by Jake VanderPlas; the content is available [on GitHub] (<https://github.com/jakevdp/WhirlwindTourOfPython>).
The text and code are released under the [CC0](#) license; see also the companion project, the [Python Data Science Handbook](#).

1. Introduction

Conceived in the late 1980s as a teaching and scripting language, Python has since become an essential tool for many programmers, engineers, researchers, and data scientists across academia and industry. As an astronomer focused on building and promoting the free open tools for data-intensive science, I've found Python to be a near-perfect fit for the types of problems I face day to day, whether it's extracting meaning from large astronomical datasets, scraping and munging data sources from the Web, or automating day-to-day research tasks.

The appeal of Python is in its simplicity and beauty, as well as the convenience of the large ecosystem of domain-specific tools that have been built on top of it. For example, most of the Python code in scientific computing and data science is built around a group of mature and useful packages:

- [NumPy](#) provides efficient storage and computation for multi-dimensional data arrays.
- [SciPy](#) contains a wide array of numerical tools such as numerical integration and interpolation.
- [Pandas](#) provides a `DataFrame` object along with a powerful set of methods to manipulate, filter, group, and transform data.
- [Matplotlib](#) provides a useful interface for creation of publication-quality plots and figures.
- [Scikit-Learn](#) provides a uniform toolkit for applying common machine learning algorithms to data.
- [IPython/Jupyter](#) provides an enhanced terminal and an interactive notebook environment that is

A decorative graphic on the left side of the slide, consisting of a network of light blue lines and small circles, resembling a circuit board or a stylized tree structure, set against a dark blue background.

5. READ, EXPLORE, PLAY, HAVE FUN!