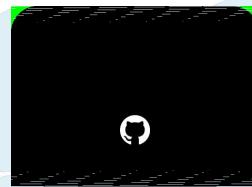


# Scientific Python

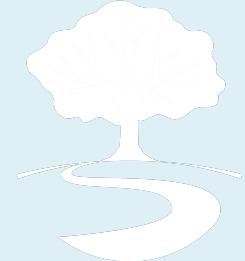
## From GitHub to TikTok



Juanita Gomez (Scientific Python) - juanitagomezr2112@gmail.com  
Melissa Mendonça (NumPy) - melissawm@gmail.com  
K. Jarrod Millman (NetworkX) - millman@berkeley.edu  
Inessa Pawson (NumPy) - inessa@albuscode.org  
Stéfan van der Walt (scikit-image, NetworkX) - stefanv@berkeley.edu

# A bit about me...

Juanita Gomez Romero



🇨🇴 Colombian

🔬 Mathematician

🐍 Former Spyder developer

💻 PhD student at UCSC

❤️ Community manager

🎤 Singer



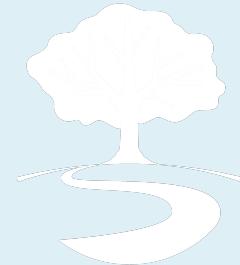
juanis2112



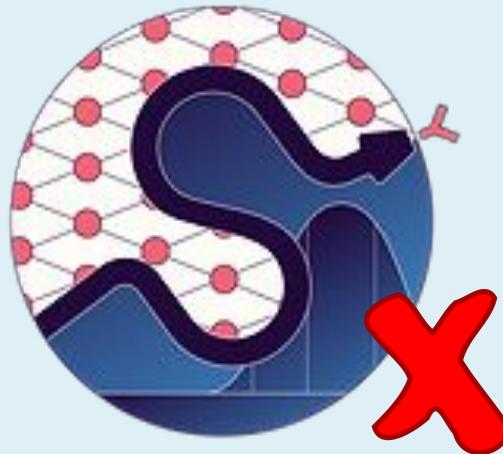
@juanitagomezr



juanitagomezr2112@gmail.com



# What is Scientific Python?



# Scientific Python



## Ecosystem



- ❑ Python packages for scientific research and data analysis

## Community



- ❑ Developers, maintainers and users of tools in the ecosystem

## Project



- ❑ Support the ecosystem and grow the community

# **What** is the Scientific Python project?



<https://github.com/scientific-python>

The screenshot shows the GitHub repository page for "Scientific Python". The repository has 21 repositories, 10 teams, and 32 people. It features a pinned section with links to various projects:

- specs** (Public) - Scientific Python Ecosystem Coordination (SPEC) documents. Python, 22 stars, 21 forks.
- scientific-python-hugo-theme** (Public) - Hugo theme based on the design for numpy.org. HTML, 9 stars, 7 forks.
- scientific-python.org** (Public) - Source code for the Scientific Python Ecosystem project page. HTML, 13 stars, 17 forks.
- blog.scientific-python.org** (Public) - Community blog posts on scientific-python.org. Jupyter Notebook, 7 stars, 13 forks.
- lazy\_loader** (Public) - Populate library namespace without incurring immediate import costs. Python, 22 stars, 6 forks.
- yaml2ics** (Public) - Convert YAML calendar entries to ICS. Python, 5 stars, 6 forks.

- Communication between projects
- Joint future



# **What** is the Scientific Python project?



## **SCIENTIFIC PYTHON ECOSYSTEM COORDINATION**

SPECs provide operational guidelines for projects in the scientific Python ecosystem. All community members and ecosystem projects are welcome to participate in the SPEC process. The SPEC process is described in the [SPEC Purpose and Process](#), [SPEC Steering Committee](#), and [SPEC Core Projects](#) documents. Community discussions take place on the [SPECs Discourse forum](#).

Contributors must adhere to our [code of conduct](#).

### Title

[SPEC 0 – Minimum Supported Versions](#)

[SPEC 1 – Lazy Loading for Submodules](#)

[SPEC 2 – API Dispatch](#)

[SPEC 3 – Accessibility](#)

### Endorsed By

DRAFT

DRAFT

DRAFT

DRAFT

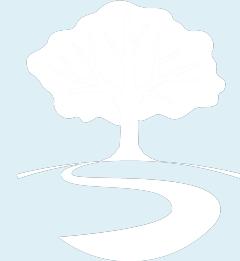
### In this talk:

- Community building**
- Community outreach**

## Cross-project policies

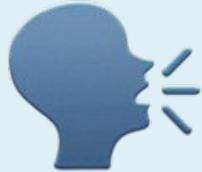


# Why?



Open source is about:

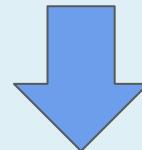
Communicating



Teaching

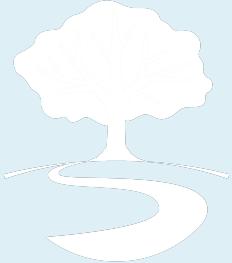


Collaborating



**Goal:** Unify the community by promoting integration, diversity, and wide participation, while generating resources that help bring contributors, developers, and users together.

# Who?



Community of volunteers from the Scientific Python packages of the ecosystem.

## Community managers



Jarrod Millman



Juanita Gomez



Kira Evans



Melissa Weber  
Mendonça



Marianne Corvellec



Mridul Seth



Ross Barnowski



Stefan van der Walt



Pamphile Roy

## Core Projects



IPython



Matplotlib



NetworkX



NumPy



pandas



scikit-image



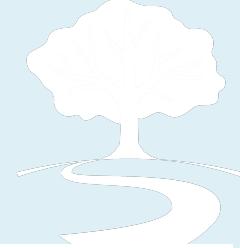
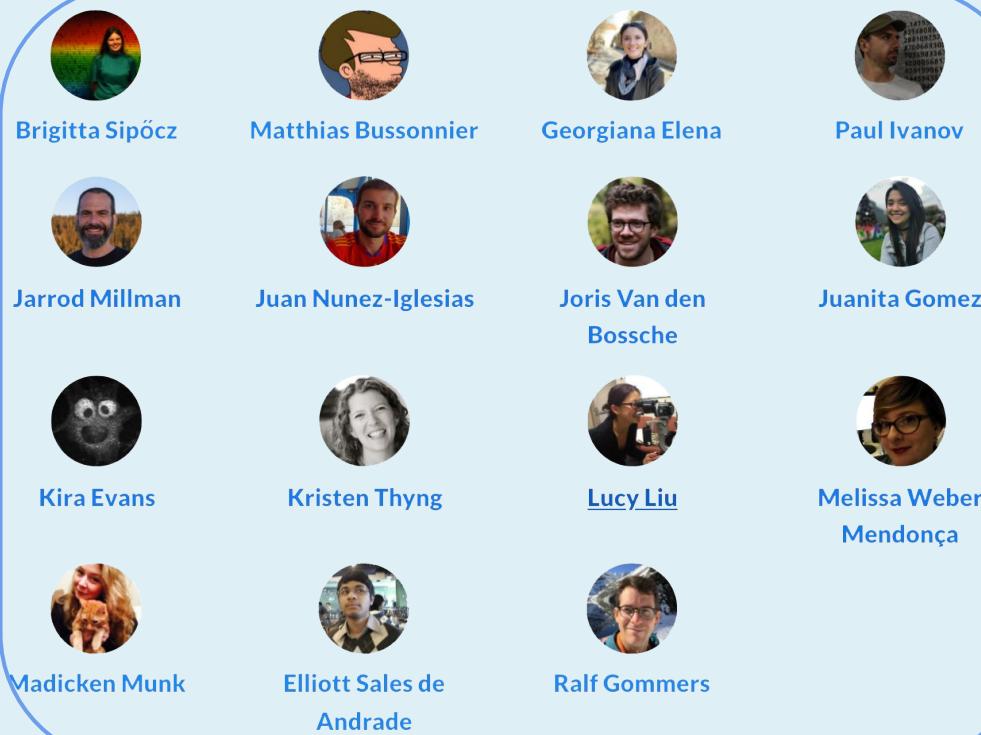
scikit-learn



SciPy

# Who?

## Steering committee



## SPEC STEERING COMMITTEE

### DESCRIPTION

The SPEC process is managed by the Steering Committee. The Steering Committee represents the interests of the ecosystem and the community. The Steering Committee also represent the interests of the [Core Projects](#) and is composed partially of individuals who are active Core Project contributors. In particular, the Steering Committee members

- monitor the [SPECs discussion forum](#),
- determine which proposed SPECs are accepted as described in the [SPEC Purpose and Process](#),
- approve changes to the SPEC process including to the [SPEC Purpose and Process](#), [SPEC Steering Committee](#), and [SPEC Core Projects](#), as well as
- serve as a communication channel to and from projects they contribute to as well as the larger ecosystem.

# How?

## 1. Documentation



<https://scientific-python.org>

- ❑ Central place for information
- ❑ Resources for many of the projects

1. Orientation for newcomers
2. Interviews for community introductions
3. Demos for problem solving

The screenshot shows the homepage of the Scientific Python website. At the top right, there are links for Home, Blog, and Discussion Forum. Below that is a large logo for "Scientific Python" with a green tree icon. To the right of the logo is the text "Community developed, community owned" and a "GET STARTED" button. A dark banner across the middle says "SPECs announced at SciPy 2021" with the date "2021-04-21". The main content area is divided into several sections with icons and descriptions:

- BUILT ON PYTHON**: Python is a powerful, general-purpose programming language. The scientific Python ecosystem provides the tools that make Python the premier language for scientific computing.
- OPEN SOURCE**: Distributed under unrestricted open source licenses, projects are developed and maintained publicly and accessible to all.
- COMMUNITY-DRIVEN**: Projects are developed by open communities composed primarily of the users of the software.
- EXTENSIVE AND HIGH QUALITY**: The scientific Python ecosystem comprises performant, well-tested libraries providing tools for computing across all scientific domains.
- BROADLY APPLICABLE**: The ecosystem is widely used in scientific research and teaching.
- COORDINATED, READABLE, REPRODUCIBLE**: Projects in the ecosystem are completely interoperable, providing the basis for readable, reproducible scientific computation.



# How?

## 1. Documentation



<https://learn.scientific-python.org>

1. Contributor Guide
2. Maintainer Guide
3. Community Guide

The screenshot shows the homepage of the "Learn Scientific Python" website. The title "Learn Scientific Python" is prominently displayed in large, dark blue letters. To the right of the title is a logo featuring a stylized green tree with a white "S" shape underneath it. Below the title, there are two main call-to-action buttons: "Contributor Guide" and "Maintainer Guide". Each button has a corresponding description below it: "Learn best-practices for contributing to Scientific Python." for the Contributor Guide and "Learn how to build, coordinate, and sustain a healthy project." for the Maintainer Guide.

**Learn Scientific Python**

**Contributor Guide**

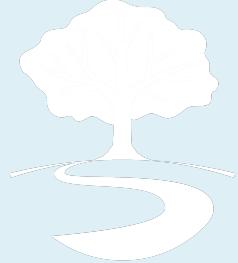
Learn best-practices for contributing to Scientific Python.

**Maintainer Guide**

Learn how to build, coordinate, and sustain a healthy project.

# How?

## 1. Documentation



### Orientation for newcomers

YouTube scientific-python ×

**WHY CONTRIBUTE**

Why Contribute to Scientific Python

**Scientific-Python**  
123 subscribers

YouTube scientific-python ×

**5 WAYS TO CONTRIBUTE**

5 Ways to Contribute to Scientific Python without Coding

**Scientific-Python**  
123 subscribers

YouTube scientific-python ×

**CHOOSE A PROJECT**

How to choose a project to contribute to Scientific Python?

**Scientific-Python**  
123 subscribers

<https://bit.ly/3Olhe1l>

# How?

## 1. Documentation



### Interviews for community introductions

**Scientific Python**

Juanita Gomez Host  
NumPy Quarnight Python Community Guest

PLAY ALL

**Maintainer Interviews**

7 videos • 21 views • Updated 7 days ago

Public ▾

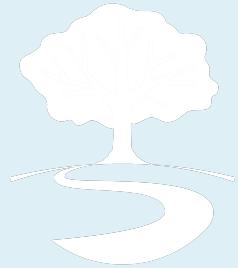
X ⌂ ...

- = SORT
- = **Meet Melissa Weber Mendonça**  
Scientific-Python 13:49
- = **Meet Dan Schult**  
Scientific-Python 28:58
- = **Meet Alex de Siqueira**  
Scientific-Python 15:02
- = **Meet Kira Evans**  
Scientific-Python 6:24
- = **Meet Ross Barnowski**  
Scientific-Python 12:47
- = **Meet Isabela Presedo-Floyd**  
Scientific-Python 14:15
- = **Meet Pamphile Roy**  
Scientific-Python 9:24

<https://bit.ly/3OQzjL8>

# How?

## 1. Documentation



### Demos for problem solving

**1. Fork the repository using the "Fork" button at the top right of the page.**

The screenshot shows the GitHub fork interface. A modal window is open with the title 'Create a new fork'. It contains fields for 'Owner' (set to 'juanit2112') and 'Repository name' (set to 'numpy'). Below the fields, it says 'By default, forks are named the same as their parent repository. You can customize the name to distinguish it further.' There is also a 'Description (optional)' field containing the text 'The fundamental package for scientific computing with Python.'. At the bottom of the modal is a green 'Create repository...' button.

**2. Give a name to your fork and click the green "Create fork" button**

The screenshot shows the GitHub fork interface after the repository has been forked. The modal window now displays the URL 'https://github.com/juanit2112/numpy' and the message 'You are creating a fork in your personal account.' At the bottom is a green 'Create repository...' button.

**3. Click the green Code button and copy the URL to your fork.**

The screenshot shows the GitHub fork interface after the repository has been forked. The modal window now displays the URL 'https://github.com/juanit2112/numpy' and the message 'You are creating a fork in your personal account.' At the bottom is a green 'Code' button.

**4. Open your terminal and clone the project to your local computer**

```
(base) ~ » git clone https://github.com/juanit2112/numpy.git
```

**5. Navigate to the folder and add the upstream repository**

```
(base) ~ » cd numpy
(juanitagomez@Filberto: ~) ~ » git remote add upstream https://github.com/numpy/numpy.git
```

<https://vm.tiktok.com/ZMNhwYPYf/?k=1>

# How?

## 2. Blogpost



<https://blog.scientific-python.org>

- ❑ Place to share thoughts and ideas
- ❑ Learn about the ecosystem
- ❑ Build knowledge together
- ❑ Integration between several packages
- ❑ Share different perspectives



The screenshot shows the homepage of the Scientific Python Blog. The header features the title "Scientific Python Blog" in a large, dark blue font, accompanied by a small green tree icon. Below the header are two buttons: "Submit a post" and "Volunteer to review". A message below the first button says "We welcome contributions from all community members." and the second says "Learn how you can help the community grow and become a member of the team." At the bottom, there is a section titled "Recent Posts" with two entries: "GSOC 2022: NETWORKX VF2++ IMPLEMENTATION" and "SCIPY INTERNSHIP: 2021-2022", each with a timestamp and hashtags.

**Recent Posts**

**GSOC 2022: NETWORKX VF2++ IMPLEMENTATION**  
Konstantinos Petridis June 9, 2022  
#gsoc #networkx

**SCIPY INTERNSHIP: 2021-2022**  
Smit Lunagariya June 4, 2022  
#scipy #internship #meson-build #uarray

# How?

## 3. Social media



- Outreach and engagement
- Direct interaction with users and developers
- Call people's attention
- Break barriers between developers and users



# Scientific Python

Community developed, community owned



[Edit profile](#)

**Scientific Python**  
@scientific\_py

Community developed, community owned

[scientific-python.org](https://scientific-python.org) Joined September 2021

31 Following 3,597 Followers

# How?

## 3. Social media



 **Scientific-Python**  
131 subscribers

[CUSTOMIZE CHANNEL](#) [MANAGE VIDEOS](#)

[HOME](#) [VIDEOS](#) [PLAYLISTS](#) [CHANNELS](#) [ABOUT](#) 

[Uploads](#)  [SORT BY](#)

Thumbnail	Title	Views	Published	CC
	<a href="#">Meet Pamphile Roy</a>	69 views	7 days ago	
	<a href="#">How to choose a project to contribute to Scientific...</a>	123 views	13 days ago	
	<a href="#">Meet Isabela Presedo-Floyd</a>	51 views	1 month ago	
	<a href="#">5 Ways to Contribute to Scientific Python without...</a>	139 views	1 month ago	CC
	<a href="#">Meet Ross Barnowski</a>	69 views	1 month ago	
	<a href="#">Why Contribute to Scientific Python</a>	258 views	2 months ago	CC
	<a href="#">Meet Kira Evans</a>	106 views	2 months ago	
	<a href="#">Meet Alex de Siqueira</a>	90 views	2 months ago	
	<a href="#">Meet Dan Schult</a>	105 views	2 months ago	
	<a href="#">Meet Melissa Weber Mendonça</a>	131 views	2 months ago	
	<a href="#">Welcome to Scientific Python!</a>	424 views	3 months ago	CC
	<a href="#">API Dispatch (December 15, 2021)</a>	103 views	5 months ago	

# How?



## 3. Social media



scientific.python

11 posts • 92 followers • 170 following

Community developed, community owned.

Community Videos

[youtube.com/playlist?list=PL7rNFJDy0iz40QvL6qvqaPs5ip-zhZdY](https://youtube.com/playlist?list=PL7rNFJDy0iz40QvL6qvqaPs5ip-zhZdY)

**SciPy2022** **Community** **Ecosystem** **Contribute** **Interviews**

# How?

## 3. Social media



Five ways to contribute to  
**Scientific Python**  
without coding



1  
Verify and triage  
issues using  
the project's  
issue tracker



2

check  open PR's  
in the project's  
repository and  
summarize  
discussions  
or test  
proposed changes

3

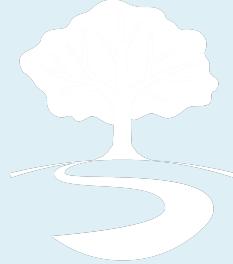
improve the project's  
documentation by  
fixing typos, reporting  
missing parts or  
creating new  
content

4

check if the project  
uses online platforms  
for translations such  
as CrowdIn and help  
translating the  
interface , webpage or  
documentation

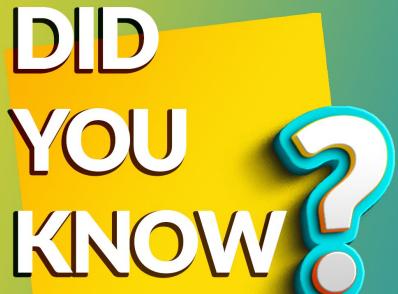
5

participate in the project's  
community by getting  
involved in discussions   
helping newcomers  
or sharing content  
on social media

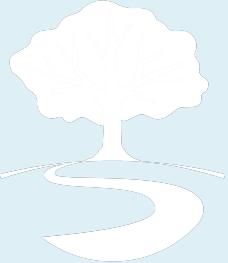


# How?

## 3. Social media



# How?



## 3. Social media



**scientific.python**  
Scientific Python

Follow

36 Following 22 Followers 130 Likes

Community developed, community owned

Videos Liked

Three core packages from the Scientific Python ecosystem ▶ 611  
Why should you contribute to Scientific Python? ▶ 4296  
Pamphile Roy from Sci... ▶ 126  
Meet Pamphile Roy! He... ▶ 92  
Scientific Python: A call for Python developers to new contributors! ▶ 536  
Isabela Presedo-Floyd... ▶ 153  
How to configure a rem... ▶ 521

Ross Barnowski from N... ▶ 133  
Meet Ross Barnowski! ... ▶ 84  
Kira Evans from the Na... ▶ 84  
Meet Kira Evans. She is... ▶ 82  
Alex de Siqueira talks a... ▶ 138  
Dan Schult from Netwo... ▶ 50  
Melissa Weber Mendo... ▶ 26



## Scientific Python

Advice from Scientific  
Python developers 🧑‍💻🧑  
to new contributors ✨



# Where?

Come join us: ❤️❤️❤️❤️❤️



[scientific-python.org](http://scientific-python.org)



[scientific-python](#)



[Scientific-Python](#)



[@scientific\\_py](#)



[scientific.python](#)



[scientific.python](#)



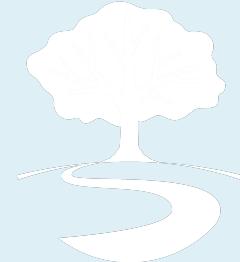
[@scientific.python](#)



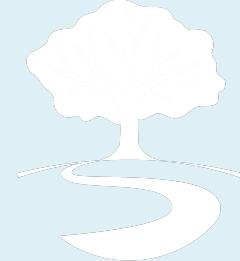
<https://discord.gg/vur45CbwMz>



<https://discuss.scientific-python.org>



# **Finally ...**



- Understand the needs of users and developers
- Consider the preferences and behaviors of our audience.
- Expand the channels of communication in order to reach a greater amount of people.
- Integrate social media because it is a big part of people's lives!

# Welcome to Scientific Python!



 juanis2112

 @juanitagomezr

 juanitagomezr2112@gmail.com

