# Contributing

We love contributions! folium is open source, built on open source,

and we'd love to have you hang out in our community.

\*\*Impostor syndrome disclaimer\*\*: We want your help. No, really.

There may be a little voice inside your head that is telling you that you're not

ready to be an open source contributor; that your skills aren't nearly good

enough to contribute. What could you possibly offer a project like this one?

We assure you - the little voice in your head is wrong. If you can write code at

all, you can contribute code to open source. Contributing to open source

projects is a fantastic way to advance one's coding skills. Writing perfect code

isn't the measure of a good developer (that would disqualify all of us!); it's

trying to create something, making mistakes, and learning from those

mistakes. That's how we all improve, and we are happy to help others learn.

Being an open source contributor doesn't just mean writing code, either. You can

help out by writing documentation, tests, or even giving feedback about the

project (and yes - that includes giving feedback about the contribution

process). Some of these contributions may be the most valuable to the project as

a whole, because you're coming to the project with fresh eyes, so you can see

the errors and assumptions that seasoned contributors have glossed over.

(This disclaimer was originally written by

[Adrienne Lowe](https://github.com/adriennefriend) for a

[PyCon talk](https://www.youtube.com/watch?v=6Uj746j9Heo), and was adapted by folium

based on its use in the README file for the

[yt project](https://github.com/yt-project/yt/blob/master/README.md))

## Usage questions

The best place to submit questions about how to use folium is via the

[gitter](https://gitter.im/python-visualization/folium) channel or on

[Stackoverflow](https://stackoverflow.com/questions/tagged/folium).

Usage question in the issue tracker will probably go unanswered.

## Reporting issues

When reporting issues please include as much detail as possible regarding the folium and python version, use of notebooks, errors in Python, errors in your browser console, etc.

Whenever possible, please also include a [short, self-contained code example](http://sscce.org) that demonstrates the problem. Don't forget a data snippet or link to your dataset.

## Contributing code

First of all, thanks for your interest in contributing!

If you are new to git/Github, please take check a few tutorials

on [git](https://git-scm.com/docs/gittutorial) and [GitHub](https://guides.github.com/).

The basic workflow for contributing is:

1. [Fork](https://help.github.com/articles/fork-a-repo/) the repository

2. [Clone](https://help.github.com/articles/cloning-a-repository/) the repository to create a local copy on your computer:

```

git clone git@github.com:${user}/folium.git

cd folium

```

3. Create a branch for your changes

```

git checkout -b name-of-your-branch

```

4. Install the [miniconda](https://docs.conda.io/en/latest/miniconda.html) to avoid any external library errors.

If using `conda` one can create a development environment with:

```

$ conda create --name FOLIUM python=3.7 --file requirements.txt --file requirements-dev.txt

```

5. Install the dependencies listed in `requirements.txt` and `requirements-dev.txt`.

```

pip install -r requirements.txt

pip install -r requirements-dev.txt

```

6. Install Chrome, download [chromedriver](https://sites.google.com/a/chromium.org/chromedriver/) and put it in the PATH.

7. Make changes to your local copy of the folium repository

8. Make sure the tests pass:

\* in the repository folder do `pip install -e . --no-deps` (needed for notebook tests)

\* run `flake8 folium --max-line-length=120`

\* run `python -m pytest tests --ignore=tests/selenium`

\* run `python -m pytest tests/selenium`

\* resolve all errors

9. Commit those changes

```

git add file1 file2 file3

git commit -m 'a descriptive commit message'

```

10. Push your updated branch to your fork

```

git push origin name-of-your-branch

```

11. [Open a pull request](https://help.github.com/articles/creating-a-pull-request/) to the python-visualization/folium

Since we're all volunteers please help us by making your PR easy to review. That means having a clear description and only touching code that's necessary for your change.

## Plugin acceptence criteria

If you have a Leaflet plugin you would like to include in folium's plugins, please

check these criteria to see if it's a good candidate.

Criteria for the Leaflet plugin:

- the plugin provides interesting new functionality.

- the plugin is not abandoned. It's okay if not all issues or PR's are being

processed, as long as there are no critical bugs or fixes being ignored.

Criteria for the Python wrapper:

- the template is simple.

- the class has not much logic, just passing some things to the template.

- no/little integration with other folium classes.

As well as these criteria for the process:

- the contributor communicates well.

- the PR is of reasonably good quality.

The \*final\* PR should contain:

- a new module in `folium/plugins` with the plugin class, with docstring

- importing that class in `folium/plugins/\_\_init\_\_.py`

- a test in `tests/plugins/test\_[new plugin module].py`

- an entry in the plugins gallery notebook `examples/Plugins.ipynb`

- optionally, a separate example notebook to show more usage examples

Before doing all this work it's a good idea to open a PR with just the plugin

to discuss whether it's something to include in folium.

If your plugin is not a good fit for folium, you should consider publishing your

plugin yourself! We can link to your plugin so users can find it.