

# python packages

...

The Fall

# pip

- `git clone https://github.com/tqdm/tqdm.git`  
`pip install .`
- `pip install git+https://github.com/tqdm/tqdm.git`
- `pip install tqdm`

# python packages

- ...are just a file structure!



# let's make a python package

...

[https://github.com/biosustain/lost\\_semester/commit/clad4c17242106830fedf1049bbc539d531fc566](https://github.com/biosustain/lost_semester/commit/clad4c17242106830fedf1049bbc539d531fc566)

# python packages are a mess

- setup.py
- setup.cfg
- pyproject.toml
- poetry: `pip install poetry`

# pytest

...

unit tests for python

# units tests

- it is difficult to know if software
- unit testing is about testing how the user interacts with software
- `pip install pytest`

# CI/CD

...

with github actions



# ci/cd

- Continuous Integration: run tests on every commit
- Continuous Deployment: publish to pypi on every X

# ci/cd

- Continuous Integration: run tests on every commit
- Continuous Deployment: publish to pypi on every X
- Github actions: for free!

The screenshot shows a GitHub repository interface. At the top, a pull request titled "carrascomj tests: add CI" is open, with a yellow dot icon, the commit hash "096a945", and the text "25 seconds ago" and "23 commits". Below the pull request, a list of files is visible: ".github/workflows", "examples", and "mypackage". A modal overlay is displayed in the center, titled "Some checks haven't completed yet" in orange text. Below the title, it says "1 in progress check". At the bottom of the modal, there is a yellow circle icon, a GitHub Actions icon, and the text "CI-CD / test (push) In progress — This check has sta...". A "Details" link is visible to the right of the modal text. The background of the repository page shows the file list and the commit history for each file.

| File              | Commit  | Time           |
|-------------------|---------|----------------|
| .github/workflows | 096a945 | 25 seconds ago |
| examples          |         | 1 hour ago     |
| mypackage         |         | 21 minutes ago |