# $\mathbf{merge}_f astq Documentation$ Release 0.1.7

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## ONE

# MERGE\_FASTQ

Package to merge multiple pair of pair-end fastq data

- Free software: Apache Software License 2.0
- Documentation: https://merge-fastq.readthedocs.io.

## 1.1 Features

• Given multiple pair-end fastq data merge them into single pair-end fastq w.r.t each READ1 and READ2

# 1.2 Usage

> merge\_fastq -help

Usage: merge\_fastq [OPTIONS]

Console script for merge\_fastq.

#### **Options:**

- **-fp1, --fastq1 PATH** Full path to gziped READ1 fastq files, can be specified multiple times for example: -fastq1 test\_part1\_R1.fastq.gz -fastq1 test\_part2\_R1.fastq.gz [required]
- **-fp2, --fastq2 PATH** Full path to gziped READ2 fastq files, can be specified multiple times for example: -fastq2 test\_part1\_R2.fastq.gz -fastq2 test\_part2\_R2.fastq.gz [required]
- -op, --output-path PATH Full path to write the output files (default: Current working directory)
- -of1, --out-fastq1 TEXT Name of the merged output READ1 fastq file (default: merged\_fastq\_R1.fastq.gz)
- -of2, --out-fastq2 TEXT Name of the merged output READ2 fastq file (default: merged\_fastq\_R2.fastq.gz)
- **--help** Show this message and exit.

# 1.3 Credits

This package was created with Cookiecutter and the audreyr/cookiecutter-pypackage project template.

**TWO** 

## **INSTALLATION**

## 2.1 Stable release

To install merge\_fastq, run this command in your terminal:

```
$ pip install merge_fastq
```

This is the preferred method to install merge\_fastq, as it will always install the most recent stable release.

If you don't have pip installed, this Python installation guide can guide you through the process.

## 2.2 From sources

The sources for merge\_fastq can be downloaded from the Github repo.

You can either clone the public repository:

```
$ git clone git://github.com/rhshah/merge_fastq
```

Or download the tarball:

```
$ curl -OJL https://github.com/rhshah/merge_fastq/tarball/master
```

Once you have a copy of the source, you can install it with:

```
$ python setup.py install
```

## THREE

## **USAGE**

To use merge\_fastq in a project:

```
import merge_fastq
merge_fastq(fastq1, fastq2)
```

To use merge\_fastq for command line:

```
> merge_fastq --help
Usage: merge_fastq [OPTIONS]
Console script for merge_fastq.
Options:
-fp1, --fastq1 PATH
                        Full path to gziped READ1 fastg files, can be
                        specified multiple times for example: --fastq1
                        test_part1_R1.fastq.gz --fastq1
                        test_part2_R1.fastq.gz [required]
-fp2, --fastq2 PATH
                        Full path to gziped READ2 fastq files, can be
                        specified multiple times for example: --fastq2
                        test_part1_R2.fastq.gz -- fastq2
                        test_part2_R2.fastq.gz [required]
-op, --output-path PATH Full path to write the output files (default:
                        Current working directory)
-of1, --out-fastq1 TEXT Name of the merged output READ1 fastq file
                        (default: merged_fastq_R1.fastq.gz)
-of2, --out-fastq2 TEXT Name of the merged output READ2 fastq file
                        (default: merged_fastq_R2.fastq.gz)
--help
                         Show this message and exit.
```

#### Example commandline:

• Using default option for multiple fastq1 and fastq2 files

```
$ merge_fastq \
--fastq1 test_part1_R1.fastq.gz \
--fastq1 test_part2_R1.fastq.gz \
--fastq2 test_part1_R2.fastq.gz \
--fastq2 test_part2_R2.fastq.gz \
```

• Using custom option for multiple fastq1 and fastq2 files

```
$ merge_fastq \
--fastq1 test_part1_R1.fastq.gz \
```

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```
--fastq1 test_part2_R1.fastq.gz \
--fastq2 test_part1_R2.fastq.gz \
--fastq2 test_part2_R2.fastq.gz \
--output-path /path/to/where/you/want/output
--out-fastq1 test_merged_R1.fastq.gz
--out-fastq2 test_merged_R2.fastq.gz
```

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### CONTRIBUTING

Contributions are welcome, and they are greatly appreciated! Every little bit helps, and credit will always be given. You can contribute in many ways:

# 4.1 Types of Contributions

## 4.1.1 Report Bugs

Report bugs at https://github.com/rhshah/merge\_fastq/issues.

If you are reporting a bug, please include:

- Your operating system name and version.
- Any details about your local setup that might be helpful in troubleshooting.
- Detailed steps to reproduce the bug.

## 4.1.2 Fix Bugs

Look through the GitHub issues for bugs. Anything tagged with "bug" and "help wanted" is open to whoever wants to implement it.

## 4.1.3 Implement Features

Look through the GitHub issues for features. Anything tagged with "enhancement" and "help wanted" is open to whoever wants to implement it.

#### 4.1.4 Write Documentation

merge\_fastq could always use more documentation, whether as part of the official merge\_fastq docs, in docstrings, or even on the web in blog posts, articles, and such.

## 4.1.5 Submit Feedback

The best way to send feedback is to file an issue at https://github.com/rhshah/merge\_fastq/issues.

If you are proposing a feature:

- Explain in detail how it would work.
- Keep the scope as narrow as possible, to make it easier to implement.
- Remember that this is a volunteer-driven project, and that contributions are welcome:)

## 4.2 Get Started!

Ready to contribute? Here's how to set up *merge\_fastq* for local development.

- 1. Fork the *merge\_fastq* repo on GitHub.
- 2. Clone your fork locally:

```
$ git clone git@github.com:your_name_here/merge_fastq.git
```

3. Install your local copy into a virtualenv. Assuming you have virtualenvwrapper installed, this is how you set up your fork for local development:

```
$ mkvirtualenv merge_fastq
$ cd merge_fastq/
$ python setup.py develop
```

4. Create a branch for local development:

```
$ git checkout -b name-of-your-bugfix-or-feature
```

Now you can make your changes locally.

5. When you're done making changes, check that your changes pass flake8 and the tests, including testing other Python versions with tox:

```
$ flake8 merge_fastq tests
$ python setup.py test or pytest
$ tox
```

To get flake8 and tox, just pip install them into your virtualenv.

6. Commit your changes and push your branch to GitHub:

```
$ git add .
$ git commit -m "Your detailed description of your changes."
$ git push origin name-of-your-bugfix-or-feature
```

7. Submit a pull request through the GitHub website.

# 4.3 Pull Request Guidelines

Before you submit a pull request, check that it meets these guidelines:

- 1. The pull request should include tests.
- 2. If the pull request adds functionality, the docs should be updated. Put your new functionality into a function with a docstring, and add the feature to the list in README.rst.
- 3. The pull request should work for Python 2.7, 3.5, 3.6 and 3.7, and for PyPy. Check https://travis-ci.org/rhshah/merge\_fastq/pull\_requests and make sure that the tests pass for all supported Python versions.

# 4.4 Tips

To run a subset of tests:

```
$ pytest tests.test_merge_fastq
```

# 4.5 Deploying

A reminder for the maintainers on how to deploy. Make sure all your changes are committed (including an entry in HISTORY.rst). Then run:

```
$ bump2version patch # possible: major / minor / patch
$ git push
$ git push --tags
```

Travis will then deploy to PyPI if tests pass.

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# **FIVE**

# **CREDITS**

# **5.1 Development Lead**

• Ronak Shah <rons.shah@gmail.com>

# 5.2 Contributors

None yet. Why not be the first?

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# SIX

# **HISTORY**

# 6.1 0.1.0 (2019-10-21)

• First release on PyPI.

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# **SEVEN**

# **INDICES AND TABLES**

- genindex
- modindex
- search