# **imSound Documentation**

Release 0.1

DataSounds

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## Readme

This page covers some instructions of imSound usage.

## Installation

#### At the command line:

```
$ git clone http://github.com/DataSounds/imSound.git
$ cd imSound
$ python setup.py install
```

#### Or, if you have virtualenvwrapper installed:

```
$ mkvirtualenv imSound
$ workon imSound
(imSound) $ git clone http://github.com/DataSounds/imSound.git
(imSound) $ cd imSound
(imSound) $ python setup.py install
```

If in doubts while using virtualenvwrapper take a look here..

### 2.1 Dependencies

pygame is a necessary package to use imSound, as well DataSounds. Both of them can be installed using **pip**. If you use virtualenvwrapper this could be done inside your virtual environment.

## Usage

To use imSound in a project:

```
from imSound import imSound
import numpy as np
data = np.random.rand(100).reshape(10,10)
```

data\_fig = imSound.ImageSound(data)
data\_fig.play\_move()

A figure is generated internally with matplotlib and coursing mouse will display sounds of data intensities.

## 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/DataSounds/imSound/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" is open to whoever wants to implement it.

#### 4.1.3 Implement Features

Look through the GitHub issues for features. Anything tagged with "feature" is open to whoever wants to implement it.

#### 4.1.4 Write Documentation

imSound could always use more documentation, whether as part of the official imSound 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/DataSounds/imSound/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 imSound for local development.

- 1. Fork the *imSound* repo on GitHub.
- 2. Clone your fork locally:

```
$ git clone git@github.com:your_name_here/imSound.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 imSound
$ cd imSound/
$ 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 imSound tests
$ python setup.py test
$ 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 2.6, 2.7, and 3.3, and for PyPy. Check https://travisci.org/DataSounds/imSound/pull\_requests and make sure that the tests pass for all supported Python versions.

### 4.4 Tips

To run a subset of tests:

\$ python -m unittest tests.test\_imSound

## Credits

## 5.1 Development Lead

• DataSounds <arnaldo@datasounds.org, luiz@datasounds.org>

### 5.2 Contributors

None yet. Why not be the first?

CHAPTER 6

# History

## 6.1 0.1.0 (2013-08-11)

• First release on PyPI.

CHAPTER 7

# **Indices and tables**

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