

---

# **Awesome Audio Documentation**

*Release 0.2.1*

**Matthieu Berjon**

**Sep 18, 2017**



---

## Contents:

---

<b>1</b>	<b>Awesome Audio</b>	<b>3</b>
<b>2</b>	<b>History of hearing</b>	<b>5</b>
<b>3</b>	<b>Software and libraries</b>	<b>7</b>
<b>4</b>	<b>Contributing</b>	<b>9</b>
4.1	Types of Contributions . . . . .	9
4.2	Get Started! . . . . .	10
4.3	Pull Request Guidelines . . . . .	10
<b>5</b>	<b>Credits</b>	<b>11</b>
5.1	Development Lead . . . . .	11
5.2	Contributors . . . . .	11
<b>6</b>	<b>Change Log</b>	<b>13</b>
6.1	[0.2.0] - 2017-01-07 . . . . .	13
6.2	[0.1.0] - Unreleased . . . . .	13
	<b>Bibliography</b>	<b>15</b>



Awesome Audio is a curated list of resources for anyone interested in audio/hearing related subject.



# CHAPTER 1

---

## Awesome Audio

---

This is a curated list of audio related knowledge and tools.

- Free documentation: Creative License CC-BY-SA 4.0.
- Documentation: <https://awesome-audio.readthedocs.io>.





## CHAPTER 2

---

### History of hearing

---

First, here are references to works written by people who have been active in hearing science (psychoacoustics, anatomy/physiology, physics/acoustics, engineering/signal processing, cognitive psychology, audiology).

#### **Books**

#### **Articles**



## CHAPTER 3

---

### Software and libraries

---

**Portaudio:** **C/C++** cross-platform library providing a simple API audio I/O management.

**PyAudio:** **Python** binding of Portaudio in Python.

**Playrec:** **matlab / octave** Binding of Portaudio for Matlab and Octave.

**LTFAT:** **matlab / octave** toolbox for time-frequency analysis and synthesis.

**Librosa:** **Python** audio and music processing.



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

## Types of Contributions

### Report Bugs

Report bugs at <https://github.com/mattberjon/awesome-audio/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.

### Fix Bugs

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

### Write Documentation

Awesome Audio could always use more documentation, whether as part of the official awesome-audio docs, in docstrings, or even on the web in blog posts, articles, and such.

## Submit Feedback

The best way to send feedback is to file an issue at <https://github.com/mattberjon/awesome-audio/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 :)

## Get Started!

Ready to contribute? Here's how to set up *awesome-audio* for local development.

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

```
$ git clone git@github.com:your_name_here/awesome-audio.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 awesome-audio
$ cd awesome-audio/
```

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*:
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.

## 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, 3.3, 3.4 and 3.5, and for PyPy. Check [https://travis-ci.org/mattberjon/awesome-audio/pull\\_requests](https://travis-ci.org/mattberjon/awesome-audio/pull_requests) and make sure that the tests pass for all supported Python versions.

### Development Lead

- Matthieu Berjon <[matthieu@berjon.net](mailto:matthieu@berjon.net)>

### Contributors

None yet. Why not be the first?





# CHAPTER 6

---

## Change Log

---

All notable changes to this project will be documented in this file.

The format is based on [Keep a Changelog](#) and this project adheres to **'Semantic Versioning'**.

### [0.2.0] - 2017-01-07

#### Added

- Sphinx support

#### Changed

Nothing.

### [0.1.0] - Unreleased

#### Added

- Adding of hearing documentation (books and articles)
- Adding of audio libraries



---

## Bibliography

---

- [Bey99] Robert T. Beyer. *Sound of Our Times: Two Hundred Years of Acoustics*. Springer-Verlag New York, 1999. URL: [www.springer.com/gp/book/9780387984353](http://www.springer.com/gp/book/9780387984353).
- [Hun92] V. Hunt, Frederik. *Origins in Acoustics*. Yale University Press, 1st edition edition, 1992.
- [Plo01] Reinier Plomp. *The Intelligent Ear: On the Nature of Sound Perception*. Psychology Press, 1st edition edition, 2001. URL: <https://www.amazon.com/Intelligent-Ear-Nature-Sound-Perception/dp/0805838678>.
- [Bor44] E. G. Boring. Sensation and perception in the history of experimental psychology. *The American Journal of Psychology*, 57(1):97–105, 1944. doi:10.2307/1416868.
- [Yos15] William A. Yost. Psychoacoustics: a brief historical overview. *Acoustics Today*, 11(3):46–53, 2015.