Awesome Audio Documentation

Release 0.2.1

Matthieu Berjon

Sep 18, 2017

Contents:

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

Contents:

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.

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

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.

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:

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 and make sure that the tests pass for all supported Python versions.

Credits

Development Lead

- Matthieu Berjon <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*. Spinger-Verlag New York, 1999. URL: 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.