
Apollon

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Contents

1	Contents	3
1.1	Before you order	3
1.2	Starters	3
1.3	Command line tools	4

apollon is a feature extraction and modelling frame work for music data analysis. It handles low-level audio feature extraction, their aggregation using Hidden Markov models, and comparison by means of the Self-Organizing Map. See the *Starters* chapter for gentle introduction to the mentioned concepts.

1.1 Before you order

1.1.1 1. Download

Download the repository from the gitlab server using `git clone git@gitlab.rrz.uni-hamburg.de:bla7667/apollon.git`

1.1.2 2. Installation

To install apollon, navigate to its repository's source directory and install using pip: `cd path/to/apollon pip install .`

1.2 Starters

1.2.1 1. Audio Feature Extraction

Extract some of the most common low-level audio features.

1.2.2 2. Hidden Markov Model

Estimate Poisson-distributed Hidden Markov Models.

1.2.3 3. Self-Organizing Map

Train some Self-organizing maps.

1.3 Command line tools

Apollon comes with a set of command line tools for those who do not want or do not need to work with the API. These utilities provide access to the most common use cases, that is, extracting features, training HMMs, training SOMS.

The command line tools, however, cannot replace the API completely. Many things like setting HMM hyper parameters are not possible at the moment.

All command line tools are invoked using the master command `apollon`. Each use case is implemented as a sub-command.

apollon TRACK_FILE FEATURE_PATH [-m --mstates] [-o --outpath]

- `genindex`
- `modindex`