academic-ads-bibtex

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ONE

INTRODUCTION

The Hugo Academic admin tool allows for the ingestion of BibTeX records to add to the publication list. One easy solution is to use the NASA ADS to retrieve such records from a NASA ADS Library. However, such records often contain LaTeX `\newcommand`. For example:

```
@ARTICLE{2016ApJS..226....5L,
   author = {{Ly}, C. and {Malhotra}, S. and {Malkan}, M.~A. and {Rigby}, J.~R. and
        {Kashikawa}, N. and {de los Reyes}, M.~A. and {Rhoads}, J.~E.
        },
    title = "{The Metal Abundances across Cosmic Time (MACT) Survey. I. Optical␣
↪Spectroscopy in the Subaru Deep Field}",
  journal = {\apjs},
archivePrefix = "arXiv",
   eprint = {1602.01089},
 keywords = {galaxies: abundances, galaxies: distances and redshifts, galaxies:␣
↪evolution, galaxies: ISM, galaxies: photometry, galaxies: star formation},
     year = 2016,
    month = sep,
   volume = 226,
      eid = {5},
    pages = {5},
      doi = {10.3847/0067-0049/226/1/5},
   adsurl = {https://ui.adsabs.harvard.edu/abs/2016ApJS..226....5L},
  adsnote = {Provided by the SAO/NASA Astrophysics Data System}
}
```

Here, the journal name is simplified to `\apjs`. This ends up propagating into Hugo Academic sites. To fix this, this simple pure Python script will convert such aliases into the full journal names. It uses a journal database to conduct the replacement.

CHAPTER

TWO

INSTALLATION

There are two ways to get the code:

1. From PyPi
2. From source

But first, we recommend creating a separate (virtual) environment to avoid any possible conflicts with existing software that you used. Instructions are provided for `conda` and `virtualenv`.

2.1 From PyPi

Using `conda`:

```
(base) $ (sudo) conda create -n bibtex python=3.7
(base) $ conda activate bibtex
(bibtex) $ (sudo) pip install academic-ads-bibtex
```

Using `virtualenv`:

```
(base) $ (sudo) conda install virtualenv  # if not installed
(base) $ mkdir academic-ads-bibtex
(base) $ cd academic-ads-bibtex
(base) $ virtualenv venv
(base) $ source venv/bin/activate
(venv) $ pip install academic-ads-bibtex
```

2.2 From Source

Using `conda`:

```
(base) $ (sudo) conda create -n bibtex python=3.7
(base) $ conda activate bibtex
(bibtex) $ git clone https://github.com/astrochun/academic-ads-bibtex.git
(bibtex) $ cd academic-ads-bibtex
(bibtex) $ (sudo) python setup.py install
```

Using `virtualenv`:

```
(base) $ (sudo) conda install virtualenv  # if not installed
(base) $ git clone https://github.com/astrochun/academic-ads-bibtex.git
(base) $ cd academic-ads-bibtex
(base) $ virtualenv venv
(base) $ source venv/bin/activate
(venv) $ python setup.py install
```

CHAPTER

THREE

EXAMPLES

The primary script to execute is academic_ads_bibtex. The above installation will include this executable in your python environment paths.

Execution requires only one argument, which is the full path to the BibTeX file. It can be provided with the `-f` or `--filename` command-line flag.

```
$ academic_ads_bibtex -f /full/path/to/my_pubs.bbl
```

By default:

1. The code uses the repository-based journal database, bibtex_journals.db. This can be changed by specifying the `-d` or `--db_filename` command-line flag.
2. The revised BibTeX file will be based on the input `filename` with the prefix changed to include `_revised`. For example, for the above case, the output file will be `/full/path/to/my_pubs_revised.bbl`. This can be changed by specifying the `-o` or `--out_filename` command-line flag.

A log file is constructed: `/full/path/to/academic_ads_bibtex.YYYY-MM-DD.log`

CHAPTER

FOUR

LICENSE

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CHAPTER

FIVE

API DOCUMENTATION

5.1 The `Converter` class

class academic_ads_bibtex.converter.**Convert**(*filename*, *db_filename*, *out_filename*, *log=None*)

Bases: `object`

Main class to perform BibTeX conversion for Academic compatibility

Parameters

- **filename** (`Union[str, Path]`) – BibTeX file
- **db_filename** (`Union[str, Path]`) – Journal database file
- **out_filename** (`Union[str, Path]`) – Modified BibTeX file
- **log** – LogClass or logger object

Variables

- **bibtex_content** (*str*) – BiBTeX content (from `import_file` method)
- **db_dict** (*dict*) – Journal database dict (from `import_database` method)
- **bibtex_revised** (*str*) – BibTeX content (from `replace` method)

import_database()
Import journal database file

Return type `dict`

import_file()
Import BibTeX file

Return type `str`

replace()
Replace journal abbreviations

Return type `str`

write_file()
Write revised BibTeX file

5.2 The LogClass class

class academic_ads_bibtex.logger.**LogClass**(*logfile*)
Bases: object

Main class to log information to stdout and ASCII logfile.

Note: Logging level is set to DEBUG for file and INFO for stdout

To use: `log = LogClass(logfile).get_logger()`

Parameters **logfile** (Union[str, Path]) – Filename for log file

get_logger()

Return type Logger

5.3 The log_stdout function

academic_ads_bibtex.logger.**log_stdout**()
Stdout logging

Return type Logger

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