# **SciBib**

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**Gaël Cousin** 

## **CONTENTS**

I	Indi	ces and tables	J
	1.1	The SciBib Package	1
	1.2	The data_query module	1
	1.3	The abstract_collector module	4
Рy	thon ]	Module Index	5
Inc	lex		7

**CHAPTER** 

ONE

## **INDICES AND TABLES**

- · genindex
- · modindex
- · search

## 1.1 The SciBib Package

This package enables scientific bibliographical data retrieval from an author's Orcid id. The main goal is to collect bibtex entries for the authors works and to collect abstracts for theses works.

Bibtex collection works fine provided the author has an orcid record and the sought article is referenced there, see data\_query.OrcidWork.bibtex.

Abstract retrieval can be performed using ArXiv's API if the article is on the Arxiv and the author associated her/his orcid id with her/his arxiv account, see data\_query.AuthorData.work\_summary\_from\_arxiv.

Another option is to get a (sometimes more up-to-date) abstract scraping the journal's website. In this case, some legal or technical obstructions might appear. However, a tool to try this technique is provided, namely the scrape\_abstract method of our OrcidWork class.

Another useful feature is to use the doi of a work to build an url that leads to the article in the publisher's website. This can be obtained with OrcidWork.doi.

Other data sources and other outputs could be added in the future, depending of the users' suggestions/pull requests.

## 1.2 The data\_query module

This module defines two classes that allow to parse author data from Orcid and arxiv. These are AuthorData and OrcidWork.

class scibib.data\_query.OrcidWork

#### Methods:

init(work_data)	Instantiate single work object.
<pre>scrape_abstract()</pre>	Scrape the work's summary from the editor/journal's
	site.

#### **Attributes:**

path	Orcid path to the data.
title	Work title.
doi	The Work's doi.
bibtex	Return the bibtex entry for self from source.

## \_\_init\_\_(work\_data)

Instantiate single work object.

#### **Parameters**

**work\_data** (nested lists/dictionaries) – part of a loaded json data corresponding to a single work, as obtained from orcid's API.

## property path

Orcid path to the data.

#### property title

Work title.

## property doi

The Work's doi.

#### Returns

the doi.

#### **Return type**

str

## property bibtex

Return the bibtex entry for self from source.

#### **Parameters**

- source (str, optional) Equals 'doi'. Defaults to 'doi'.
- future. (Other sources might be available in the) -

## scrape\_abstract()

Scrape the work's summary from the editor/journal's site. Beware that you might need authorization from the editor/journal to use this functionality.

## class scibib.data\_query.AuthorData

A class to parse Orcid author entries.

#### **Methods:**

init(orcid_id)	Instantiator
<pre>work_summary_from_arxiv(orcid_work)</pre>	Match work with an arxiv entry to provide a sum-
	mary.

## **Attributes:**

orcid_record	The raw orcid record as a parsed json.
arxiv_record	The raw arxiv record as an atom feed.
articles	list of article entries in the author's Orcid entry.
orcid_id_is_on_arxiv	Check if the author associated his/her Arxiv with Orcid.
arxiv_summaries_dic	Return dict that maps arxiv_entries -> abstracts for the author.

#### \_\_init\_\_(orcid\_id)

Instantiator

#### **Parameters**

orcid\_id (str) - The author's orcid id

#### property orcid\_record

The raw orcid record as a parsed json.

#### **Returns**

The raw orcid record as a parsed json (using json.load).

## Return type

list

#### property arxiv\_record

The raw arxiv record as an atom feed.

## property articles

list of article entries in the author's Orcid entry.

## Returns

list of article entries, formatted as OrcidWork instances.

#### Return type

list[OrcidWork]

## property orcid\_id\_is\_on\_arxiv

Check if the author associated his/her Arxiv with Orcid.

## Returns

True if yes, False if no!

## Return type

bool

## property arxiv\_summaries\_dic

Return dict that maps arxiv\_entries -> abstracts for the author.

## work\_summary\_from\_arxiv(orcid\_work)

Match work with an arxiv entry to provide a summary.

#### **Parameters**

orcid\_work (OrcidWork) – the work that needs summary.

## Returns

The guessed summary

## Return type

str

## 1.3 The abstract\_collector module

This module defines the main\_paragraph function.

## **Functions:**

main_paragraph(url)	From a web page, return the paragraph with the biggest
	length.

scibib.abstract\_collector.main\_paragraph(url)

From a web page, return the paragraph with the biggest length.

#### **Parameters**

**url** (*str*) – the url of the web page to treat.

## **PYTHON MODULE INDEX**

## S

scibib, 1
scibib.abstract\_collector, 3
scibib.data\_query, 1

6 Python Module Index

## **INDEX**

```
Symbols
                                                          module, 3
                                                     scibib.data_query
__init__() (scibib.data_query.AuthorData method), 3
                                                          module, 1
__init__() (scibib.data_query.OrcidWork method), 2
                                                     scrape_abstract()
                                                                              (scibib.data_query.OrcidWork
                                                              method), 2
articles (scibib.data_query.AuthorData property), 3
arxiv_record (scibib.data_query.AuthorData prop-
                                                      \verb|title| (scibib.data\_query.OrcidWork| property), 2
arxiv_summaries_dic (scibib.data_query.AuthorData
                                                     W
        property), 3
                                                     work_summary_from_arxiv()
AuthorData (class in scibib.data_query), 2
                                                              (scibib.data_query.AuthorData
                                                                                                 method),
В
bibtex (scibib.data_query.OrcidWork property), 2
D
doi (scibib.data_query.OrcidWork property), 2
M
main_paragraph()
                                             module
        scibib.abstract_collector), 4
module
    scibib, 1
    scibib.abstract_collector, 3
    scibib.data_query, 1
0
orcid_id_is_on_arxiv
         (scibib.data_query.AuthorData
                                          property),
orcid\_record (scibib.data_query.AuthorData prop-
OrcidWork (class in scibib.data_query), 1
Р
path (scibib.data_query.OrcidWork property), 2
S
scibib
    module, 1
```

scibib.abstract\_collector