RAWR

Receiving Credit for Research Software

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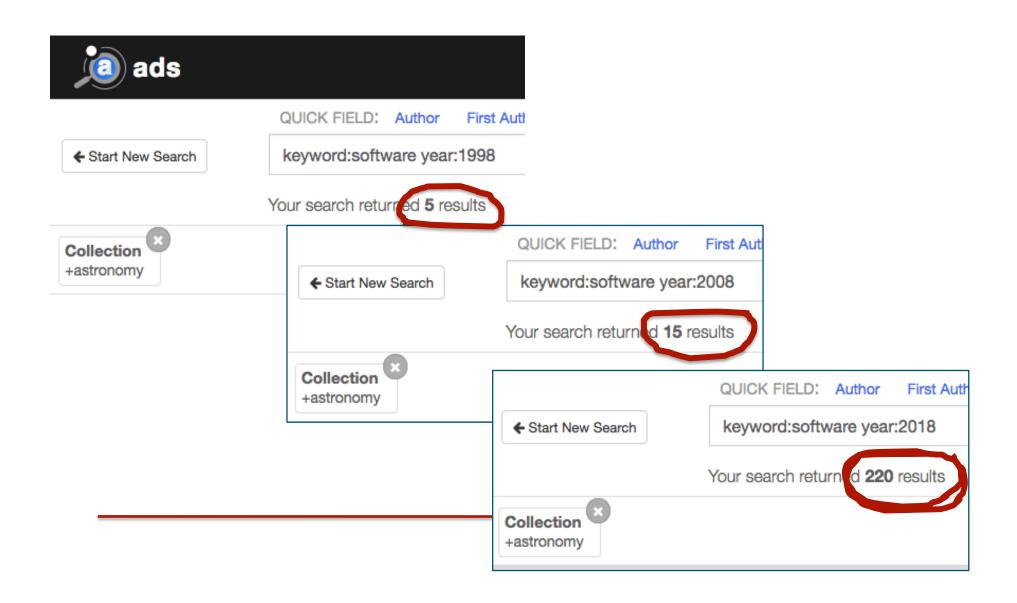*@owlice   @asclnet   aallen@ascl.net*

Abstract

Though computational methods are widely used in many disciplines, those who author these methods have not always received credit for their work. This presentation will cover recent changes in astronomy, and indeed, in many other disciplines, that include new journals, policy changes for existing journals, community resources, changes to infrastructure, and availability of new workflows that make recognizing the contributions of software authors easier. This talk will include steps coders can take to increase the probability of having their software cited correctly and steps researchers can take to improve their articles by including citations for the computational methods that enabled their research.

ADASS

← 1997

2017 →

ads

QUICK FIELD: Author   First Auth

← Start New Search

keyword:software year:1998

Your search returned **5** results

Collection
+astronomy

QUICK FIELD: Author   First Aut

← Start New Search

keyword:software year:2008

Your search returned **15** results

Collection
+astronomy

QUICK FIELD: Author   First Auth

← Start New Search

keyword:software year:2018

Your search returned **220** results

Collection
+astronomy

Software is the most used instrument in astronomy

New journals

2012 – JORS
Journal of Open Research Software

2013 - A&C
Astronomy and Computing

2014 – ComAC
Computational Astrophysics and Cosmology

2015 - SoftX
Software X

2016 – JOSS
Journal of Open Source Software

2017 – RNAAS
Research Notes of the AAS

Changes in existing journals

Encourage or require software citations

Allow software articles without research results

Encourage or require code release

Community resources

More places to put software and
    information about software

Indexers capture/track software citations

Broader efforts cross disciplines and
    influence others

Even more ADS magic

Doctype field value *software*

Can be combined with other fields, such as *keyword*

GREATER RECOGNITION

1. Release your software

"… anything less than release of actual source code is an indefensible approach for any scientific results that depend on computation…"

Ince, Hatton, & Graham-Cumming, *The case for open computer programs,* Nature, v. 482, Feb. 23, 2012

…"a hidden coding error fueled a seven-year dispute between two of condensed matter's top theorists." Physics Today, 22 Aug 2018

…a change in a code researchers had not noticed led to incorrect results
M. Zorotovic, M. R. Schreiber and S. G. Parsons, A&A, Aug 2014

1. Release your software
2. Assign a license
3. Specify how you want your software cited

Citation methods

Software itself via ASCL, JOSS, DOI from
   archiving service

Article using or describing the code

~~GitHub, SourceForge, BitBucket repo URL~~ *NO!*

~~URL to personal institutional page~~ *NO!*

~~URLs in general~~ *NO!*

1. Release your software
2. Assign a license
3. Specify how you want your software cited
4. Register your code

Benefits

Unique identifier

Listing in ADS (Web of Science, Google Scholar)

Trackable citation method

Increased discoverability

How to register

Use handy online form
Email info to editor@ascl.net
Submit via CodeMeta.JSON file

1. Release your software
2. Assign a license
3. Specify how you want your software cited
4. Register your code
5. Archive your code
6. Cite other people's codes well
7. Include a software section in articles

You can change the world!*

Information on the resources mentioned is available at:
https://tinyurl.com/ADASS2018-Creditforsoftware

* At least a small part of it, which is still cool!