CiteAs [1] alpha

Bridging Gaps in Research Software Collaboration

C.Fan Du	The University of Texas at Austin
James Howison	The University of Texas at Austin
Heather Piwowar	Our Research
Jason Priem	Our Research
Patrice Lopez	Science-Miner

@ SciTS 2020, June 2020

CiteAs[1]
alpha

Why does Research Software Collaboration matter?

> Do you use software in your research?
> What software do you use in your research?
> Have you mentioned the software you used in your research publications?
> Do you know how to cite software in your publications?

CiteAs [1]
alpha

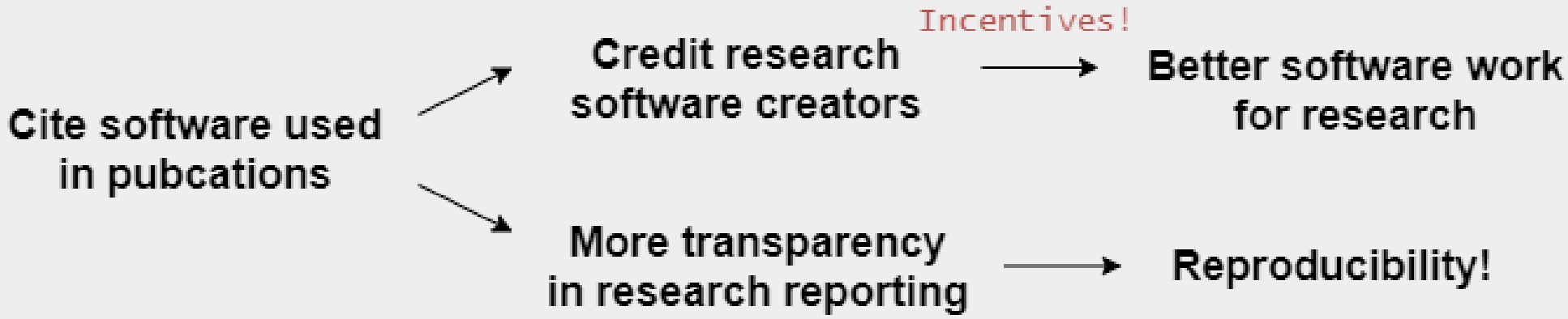
Why does Research Software Collaboration matter?

Or, maybe you are already a coding veteran...

> Have you packaged and shared your code?
> When you share your code, have you made a citation request?
> Have your users cited your software in their publications?

@caifandu

For research software users:



For research software creators:

CiteAs [1] alpha

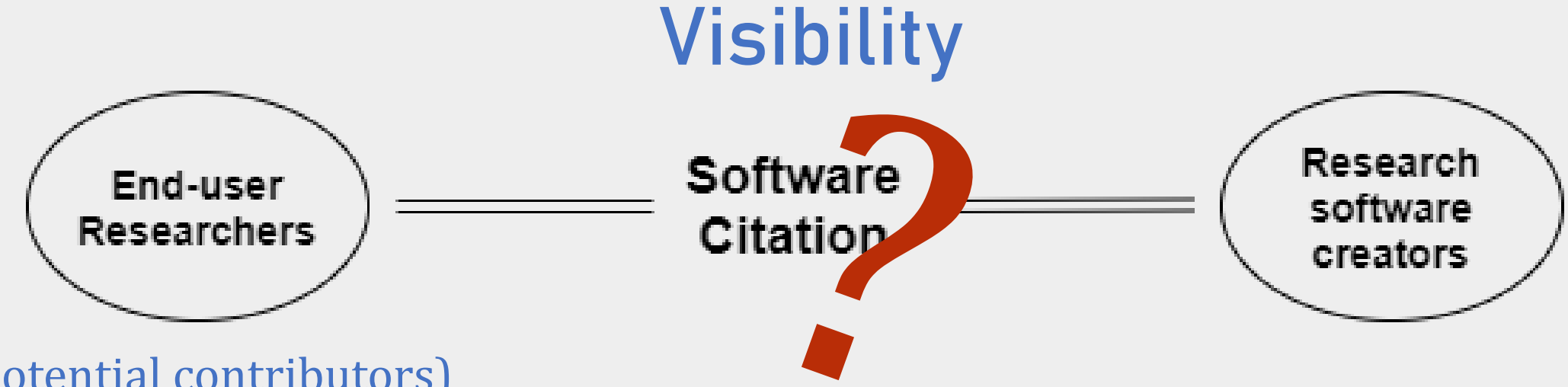
Simply facts…

Many research software are open source and rely on voluntary teamwork for development and maintenance.

Citation increases the chance for the co-development of software, and thus virtual collaboration for research.

CiteAs[1] alpha

The gap…



(potential contributors)

CiteAs [1] alpha

Making citation requests…

Citing packages in the SciPy ecosystem

A number of articles related to scientific computing with Python have appeared; a selection related to some of the core toolstack are listed below. See also the May 2007 and March 2011 editions of the journal *Computing in Science & Engineering*, which focuses on scientific computing with Python.

About SciPy
Getting started
Documentation
Install
Bug reports

Citation of PyTe

The pac
Sekhon
Statistic

GenMa
chips o

einstein toolkit

Home About Download Documentation Help! Contribute Gallery

Citation Guidelines

The development of production level scientific software, such as the components of the Einstein Toolkit, represents the academic output of researchers who bring together skills in formulations, algorithms and software engineering as well as substantial domain knowledge. The scientific contributions of such researchers should be acknowledged and respected on a par with those whose expertise lie solely in theory or experiment. Further, most contributions to the Einstein Toolkit have been provided by early stage researchers — graduate students, postdocs and young assistant professors, where proper and appropriate citation of their contributions is crucial for furthering academic careers.

The primary way to cite the Einstein Toolkit is now by the DOI assigned to the current release doi:10.5281/zenodo.3522086 (key: EinsteinToolkit:2019_10). This method cites the software and assigns credit to the many contributers over the years.

A secondary way to cite the toolkit is through the publication (key Loffler:2011ay in the Einstein Toolkit BibTeX file): Frank Löffler, Joshua Faber, Eloisa Bentivegna, Tanja Bode, Peter Diener, Roland Haas, Ian Hinder, Bruno C. Mundim, Christian D. Ott, Erik Schnetter, Gabrielle Allen, Manuela Campanelli, and Pablo Laguna. The Einstein Toolkit: A Community Computational Infrastructure for Relativistic Astrophysics. *Classical and Quantum Gravity*, 29(11):115001, 2012. (doi:10.1088/0264-9381/29/11/115001)

```
Eric W. and {Vand erPlas}, Jake and {Laxalde}, Denis and
```

CiteAs [1]
alpha

@caifandu

Our Solution!

CiteAs [1] alpha as a Specialized Search Engine

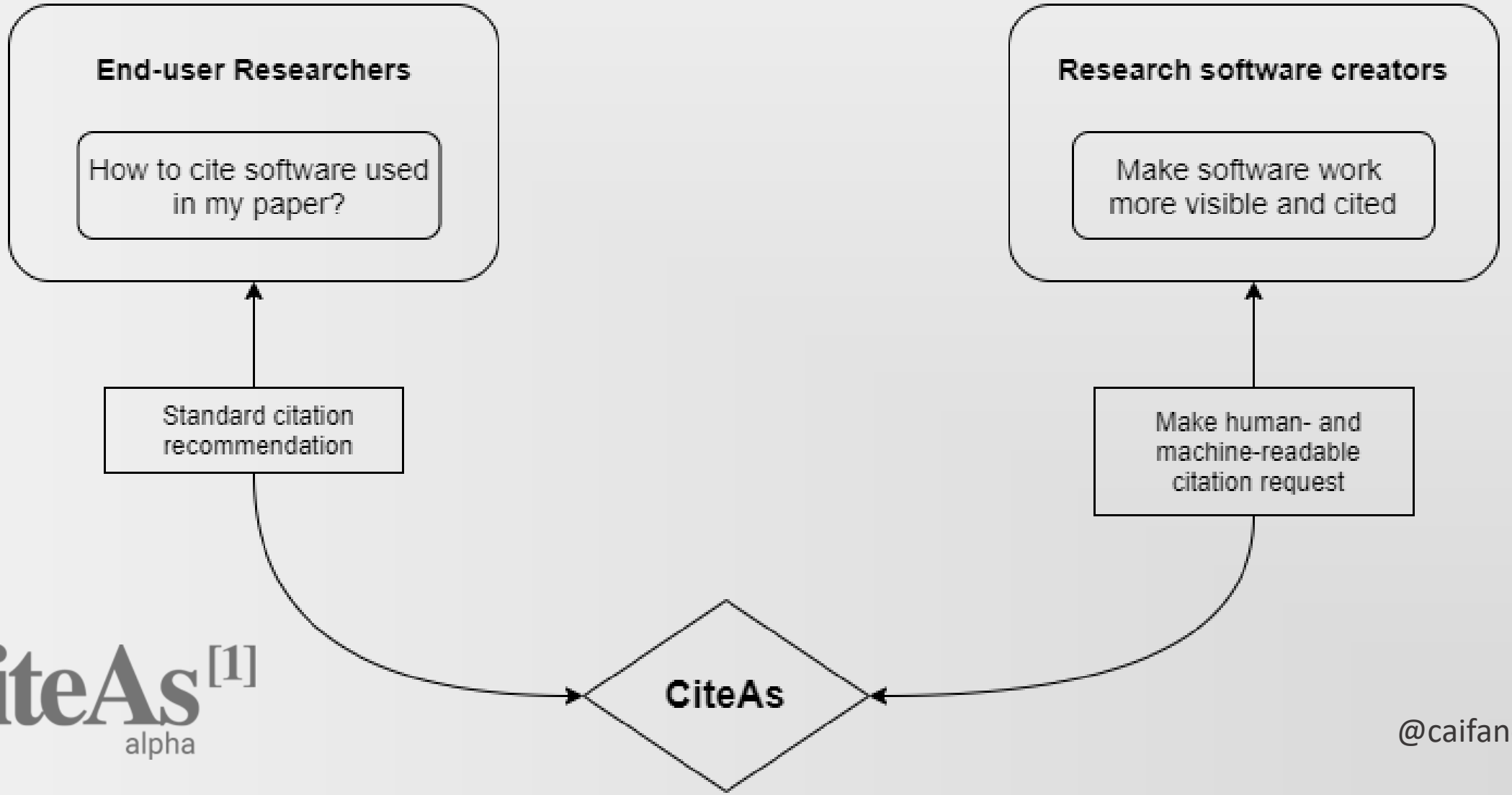
> What does CiteAs do?

> Bring potential contributors and software creators together

Example:

CiteAs[1] alpha: http://citeas.org/

CiteAs links potential research software collaborators and increases the chance for team collaboration.



CiteAs [1]
alpha

@caifandu

CiteAs[1]
alpha

For trying out CiteAs: http://citeas.org/

For contributing and bug report:
https://github.com/ourresearch/citeas-webapp

Any questions or ideas welcome:
cfdu@utexas.edu

THANKS! @caifandu