



The ugly child of research: **Software Citations!**

https://commons.wikimedia.org/wiki/File:Marnie_the_Dog_celebrating%27s_Day.jpg

HELLO!

From Alan Hyndman and Robert Peters

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<https://www.flickr.com/photos/wiredforsound23/8525829557>

Ok, why ugly child?

I suppose we should explain....

Researchers ignore them

- Figshare - Software 728 vs Datasets 332,727
- DataCite - Software 10,458 vs Datasets 1,727,327

Sample APA software citation:

“Customized Synergy
[Computer software]. (2014). Retrieved from <http://customizedsynergy.com>”

- Doesn't include the authors!
- Doesn't include identifiers.
- Doesn't include versioning.
- Not as comprehensive as other APA citation styles.

Their purpose is confusing

- Reproducibility
- Credit
- Is software even a citable output????

There are no mandates

- **Open Access Mandates** - 550 universities and research institutions, and over 140 research funders worldwide.
- **Open Data Mandates** - Several funders have open data mandates.
- **ORCID iD** - Several funders have ORCID iD mandates.

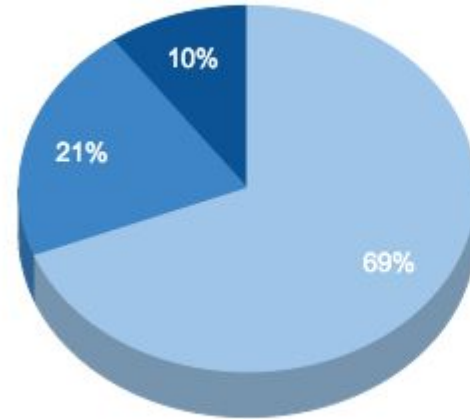
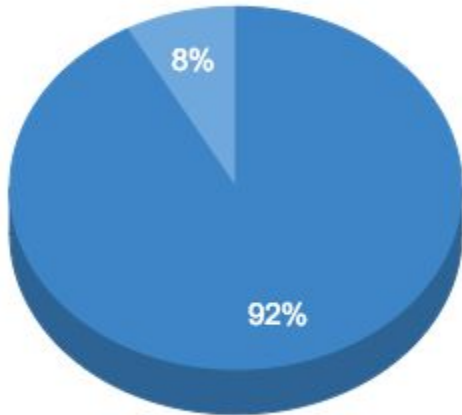
**It's time to put
up a fight**

https://upload.wikimedia.org/wikipedia/en/a/af/Rey_Star_Wars.png



Do you use research software?

What would happen if you could no longer use research software?

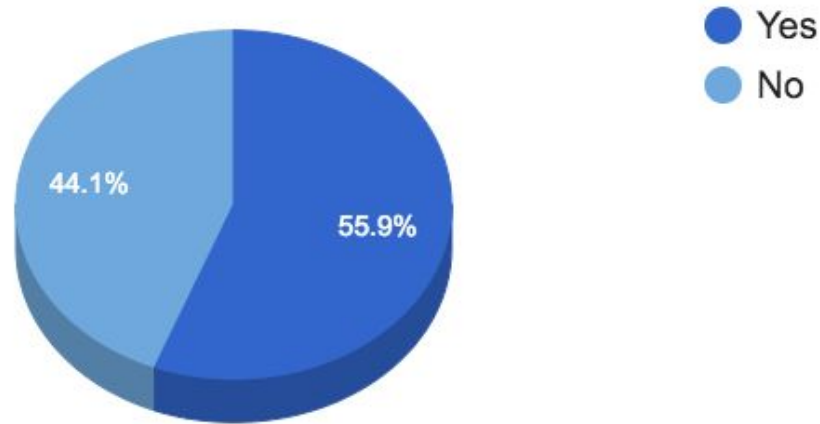


- It would not be practical to conduct my work without software
- My work would require more effort, but it would still be possible
- It would make no significant difference to m...

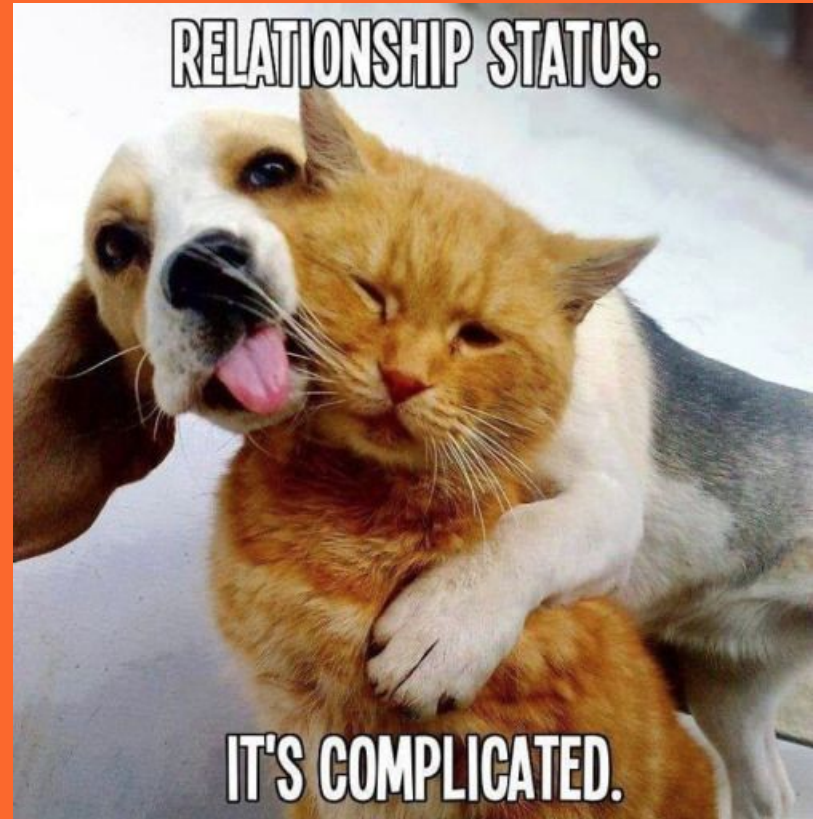
**“Software is
eating the world”**

-MARC ANDREESSEN

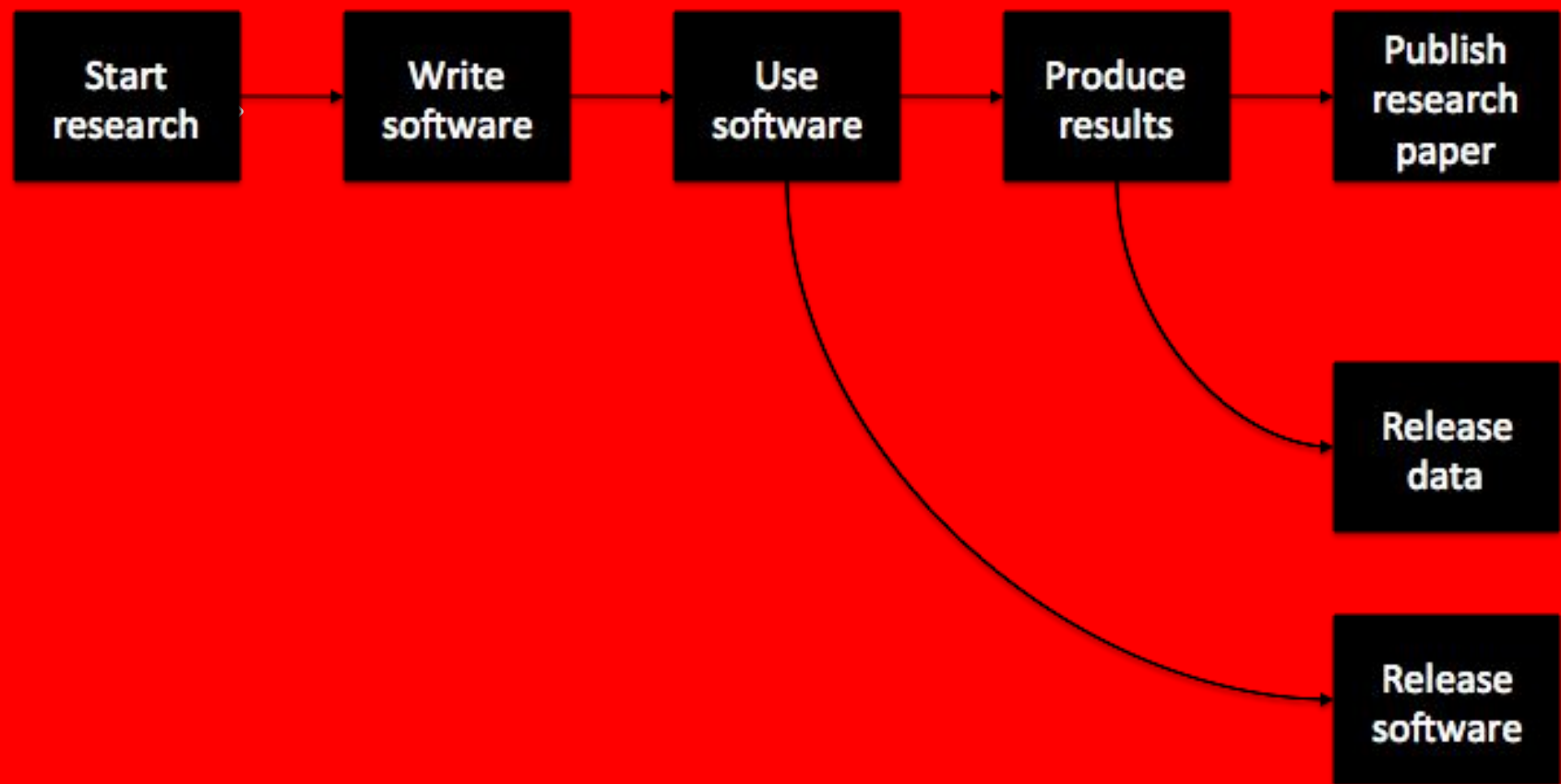
Do you develop your own research software?



**But wait a
second..**



**Let's get the
process right
first..**





Neil Chue Hong

2nd

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Edinburgh, United Kingdom | Information Technology and Services

Current EPCC, EPSRC, Freelance

Previous British Federation of Film Societies, The, Edinburgh International Film Festival, Algorithms and Software for Emerging Architectures (ASEArch)

Education The University of Edinburgh

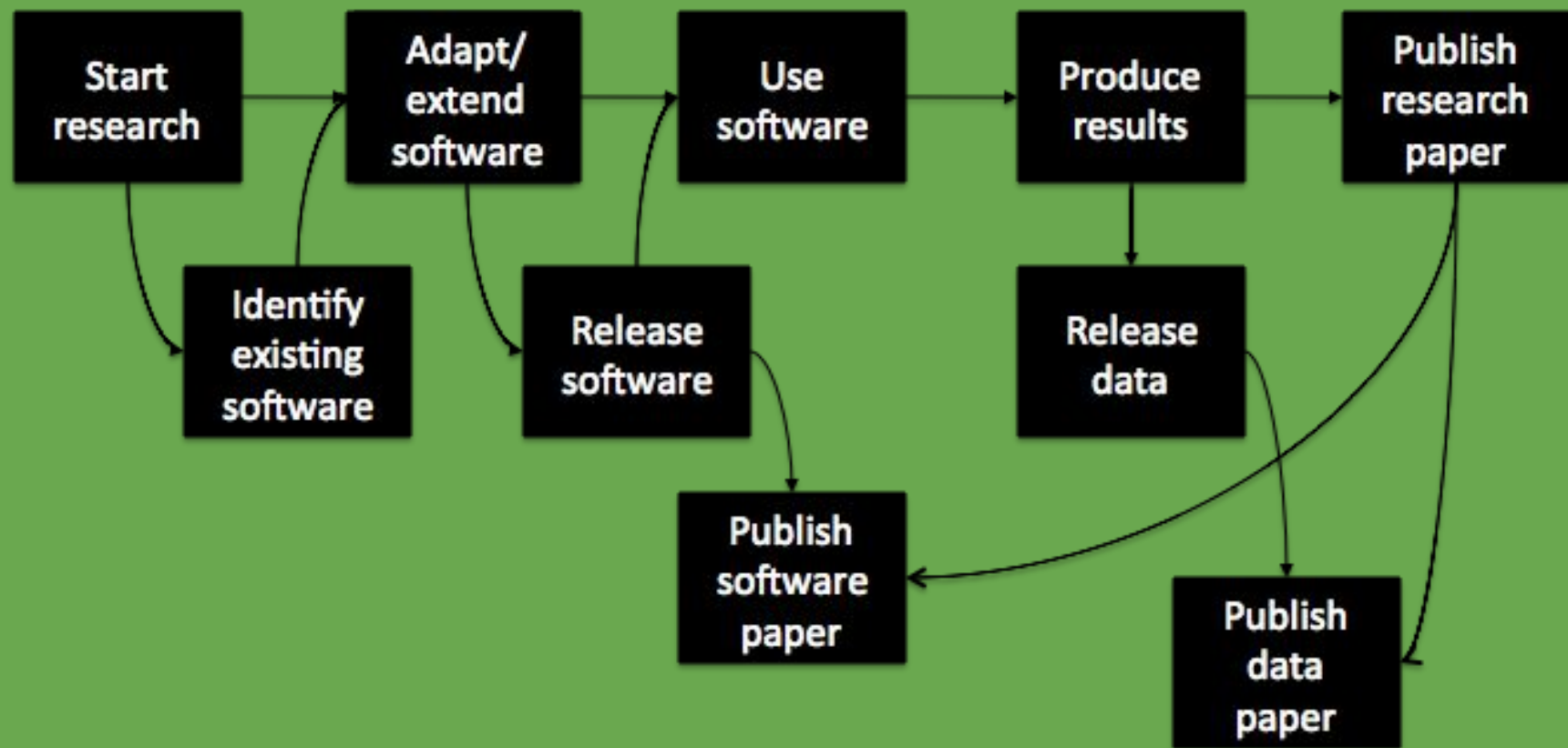
Connect

Send Neil InMail



500+
connections

https://figshare.com/authors/Neil_Chue_Hong/96503



Boundary

http://www.myexperiment.org/workflows

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ADA | alignment | **benchmarks** | bio2rdf | BioAID | biossist_nt | bioinform
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annotation | pubmed | semantic_web | sequence | sequence alignment | sequence s
mining | text_mining | tutorial | uniprot | VL

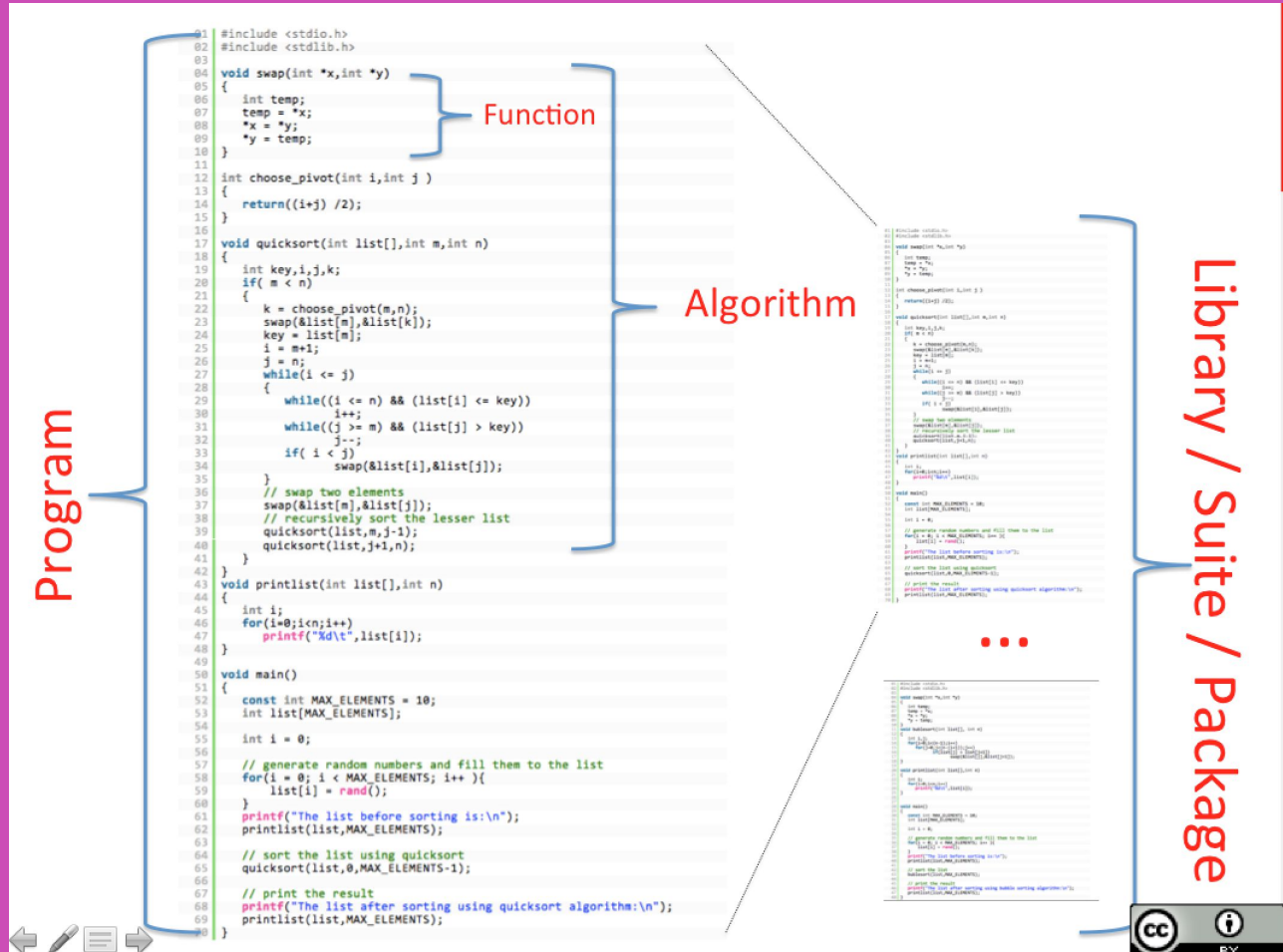
Latest Last Updated Most Viewed Most Downloaded Most Fa

Taverna 1 **Identify_strain_and_phylogenetic_tree**
Created: 2003/09 @ 15:20:36 | Last updated: 2003/09 @
Credits: Aailyso Hanish McWilliam AID
License: Creative Commons Attribution-Share Alike 3.0 Licen
Original Uploader
Aailyso
No description
Rating: 0.0 / 5 (0 ratings) | Versions: 1 | Reviews: 0 | Com
Viewed internally: 30 times | Downloaded internally: 1 tim
Tags (6):
clustalw | database | BLAST | blast | clustalw | phylogenetic tre

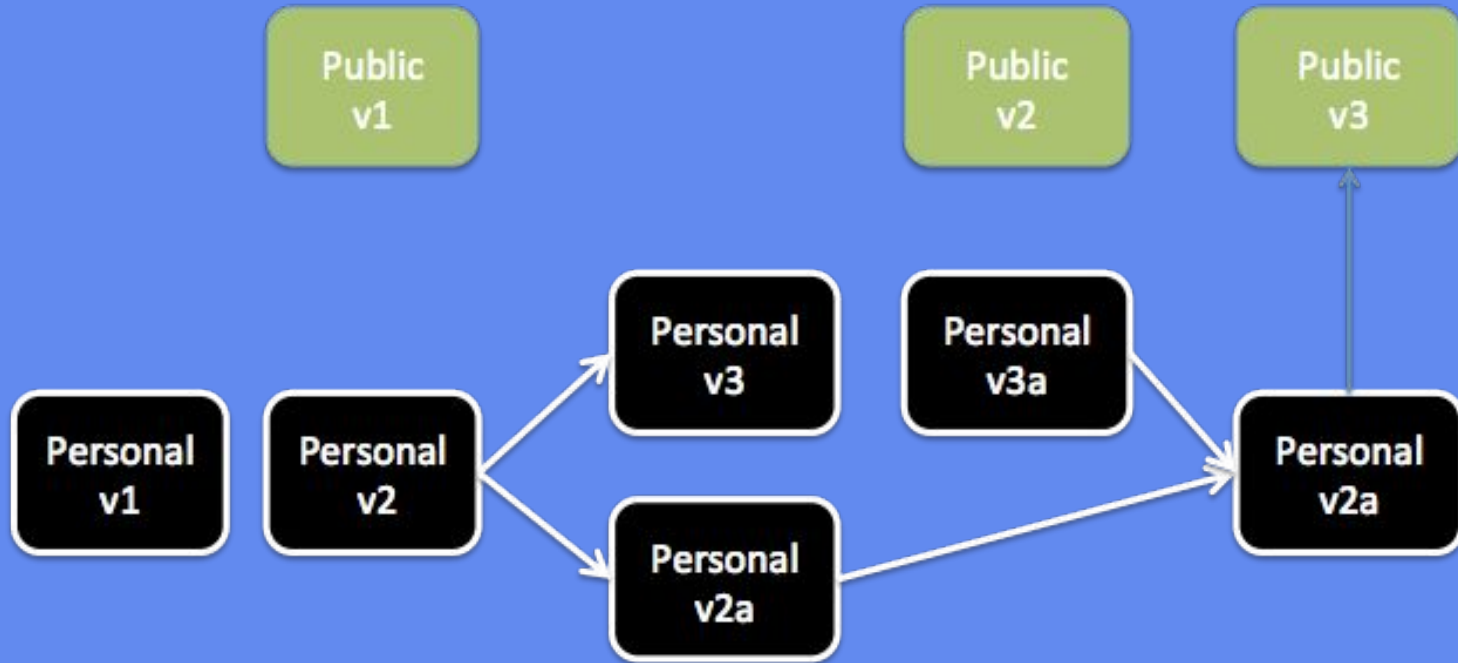
Taverna 1 **fetch_fasta (v1)**
Created: 2003/09 @ 11:22:45 | Last updated: 2003/09 @ 11:29:17
Download (v1)

The diagram illustrates a complex workflow for identifying strains and building a phylogenetic tree. It starts with 'Fetch FASTA' and 'Fetch FASTA (v1)' steps, which lead to 'BLAST' and 'BLAST (v1)' steps. These steps then feed into 'ClustalW' and 'ClustalW (v1)' steps, which finally lead to 'Phylogenetic Tree' and 'Phylogenetic Tree (v1)' steps. The workflow is organized into several interconnected boxes, each representing a different stage or component of the process. The diagram is highly detailed, showing numerous sub-steps and data flows between them.

Granularity



Versioning

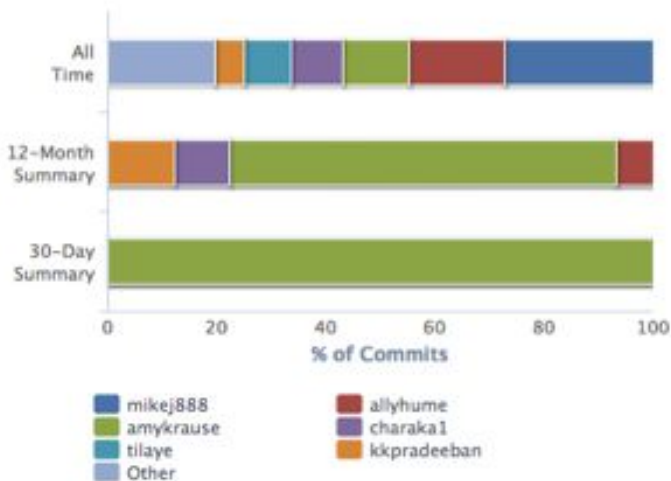


Authorship

Contributors

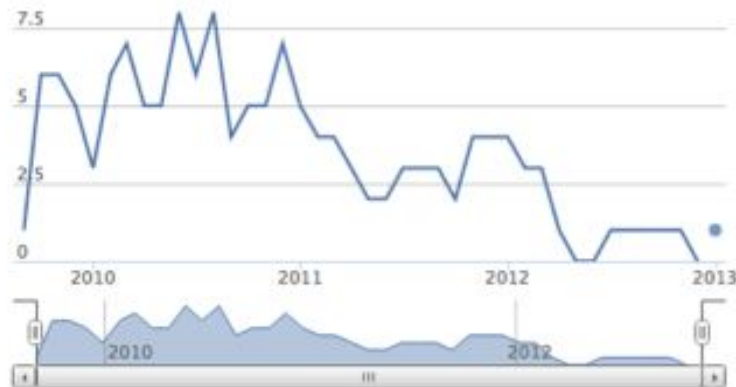
Commits by Top Contributors

amykrause generated more than 50% of all commits during the past 12 months.



Number of Contributors

Zoom 1yr 3yr All



OGSA-DAI projects statistics
from Ohloh

Head hurt yet?

Don't worry here's
what you can do.



Step 1

Admit you have a problem



http://3.bp.blogspot.com/_en3tE7aKwk8/S69I_GVhWYI/AAAAAAAAABtU/W-Qmvg3r3SI/s1600/drunken+animals+2.jpg

Step 2

Join the conversation



https://41.media.tumblr.com/c6dd41199dd967e7f653ceab0607a27e/tumblr_mvsvuj4741w1sb2ue8o1_500.jpg



Force11 Software Citation Working Group

<https://www.force11.org/group/software-citation-working-group>

Join the group

<https://github.com/force11/force11-scwg#members>

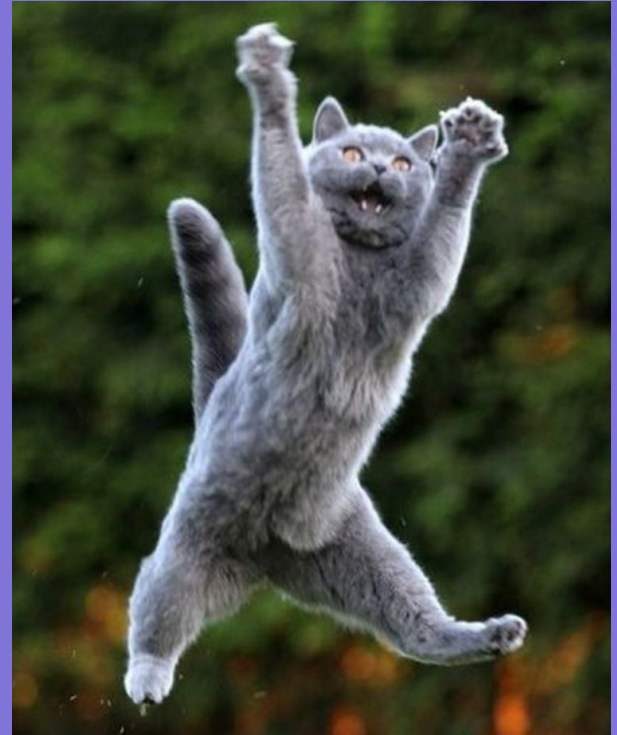
Paper Badges



<https://badges.mozillascience.org/>

Step 3

Take the plunge!



<http://www.somepets.com/wp-content/uploads/2014/07/Jumping-cats22.jpg>

Get credit for your code!

Start Now

Archive your GitHub code repository to figshare and receive a citable DOI.



GitHub

Edit, share and improve your code in a collaborative environment.



Mozilla Science Lab

Tools to get your research on the web.



Figshare

Persistent, citable, long-term archiving for your research outputs.



ORCID

Distinguish yourself from others and get credit for your work



<http://depsy.org/>



THANKS!

Any questions?

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& r.peters@orcid.org**