Improving openness and reproducibility of scholarly research

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University of Virginia -- Center for Open Science

http://briannosek.com/ -- http://cos.io/

JOHN TEMPLETON FOUNDATION

Norms

Communality

Open sharing

Counternorms

Secrecy

Closed

Norms

Communality

Open sharing

Universalism

Evaluate research on own merit

Counternorms

Secrecy

Closed

Particularlism

Evaluate research by reputation

Norms	Counternorms
Communality	**Secrecy**
Open sharing	Closed
Universalism	**Particularlism**
Evaluate research on own merit	Evaluate research by reputation
Disinterestedness	**Self-interestedness**
Motivated by knowledge and discovery	Treat science as a competition

Norms	Counternorms
Communality Open sharing	**Secrecy** Closed
Universalism Evaluate research on own merit	**Particularlism** Evaluate research by reputation
Disinterestedness Motivated by knowledge and discovery	**Self-interestedness** Treat science as a competition
Organized skepticism Consider all new evidence, even against one's prior work	**Organized dogmatism** Invest career promoting one's own theories, findings

Norms

Communality

Open sharing

Universalism

Evaluate research on own merit

Disinterestedness

Motivated by knowledge and discovery

Organized skepticism

Consider all new evidence, even against one's prior work

Quality

Counternorms

Secrecy

Closed

Particularlism

Evaluate research by reputation

Self-interestedness

Treat science as a competition

Organized dogmatism

Invest career promoting one's own theories, findings

Quantity

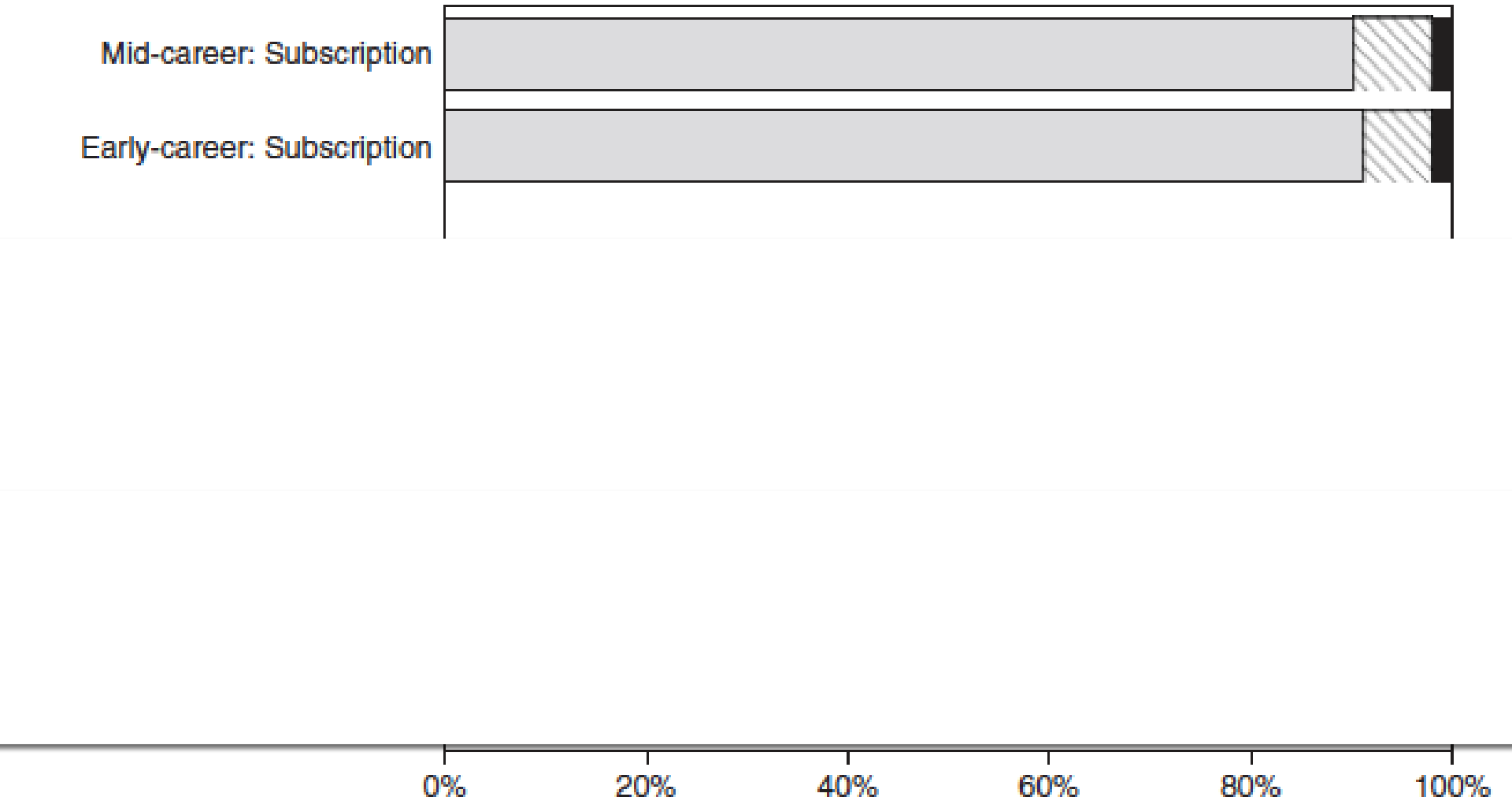


FIG. 3. Norm versus Counternorm Scores: Percent with Norm > Counternorm (dotted), Norm = Counternorm (striped), Norm < Counternorm (solid).

Anderson, Martinson, & DeVries, 2007

Incentives for individual success are focused on getting it published, not getting it right

Nosek, Spies, & Motyl, 2012

Technology to *enable* change

Training to *enact* change

Incentives to *embrace* change

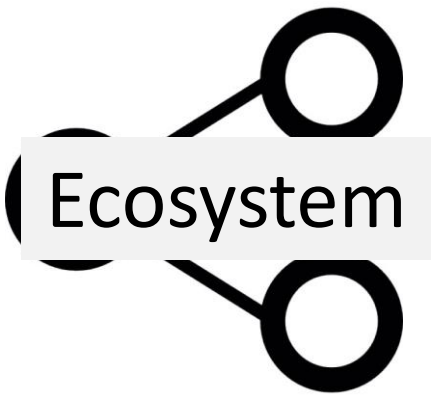
Community Interfaces

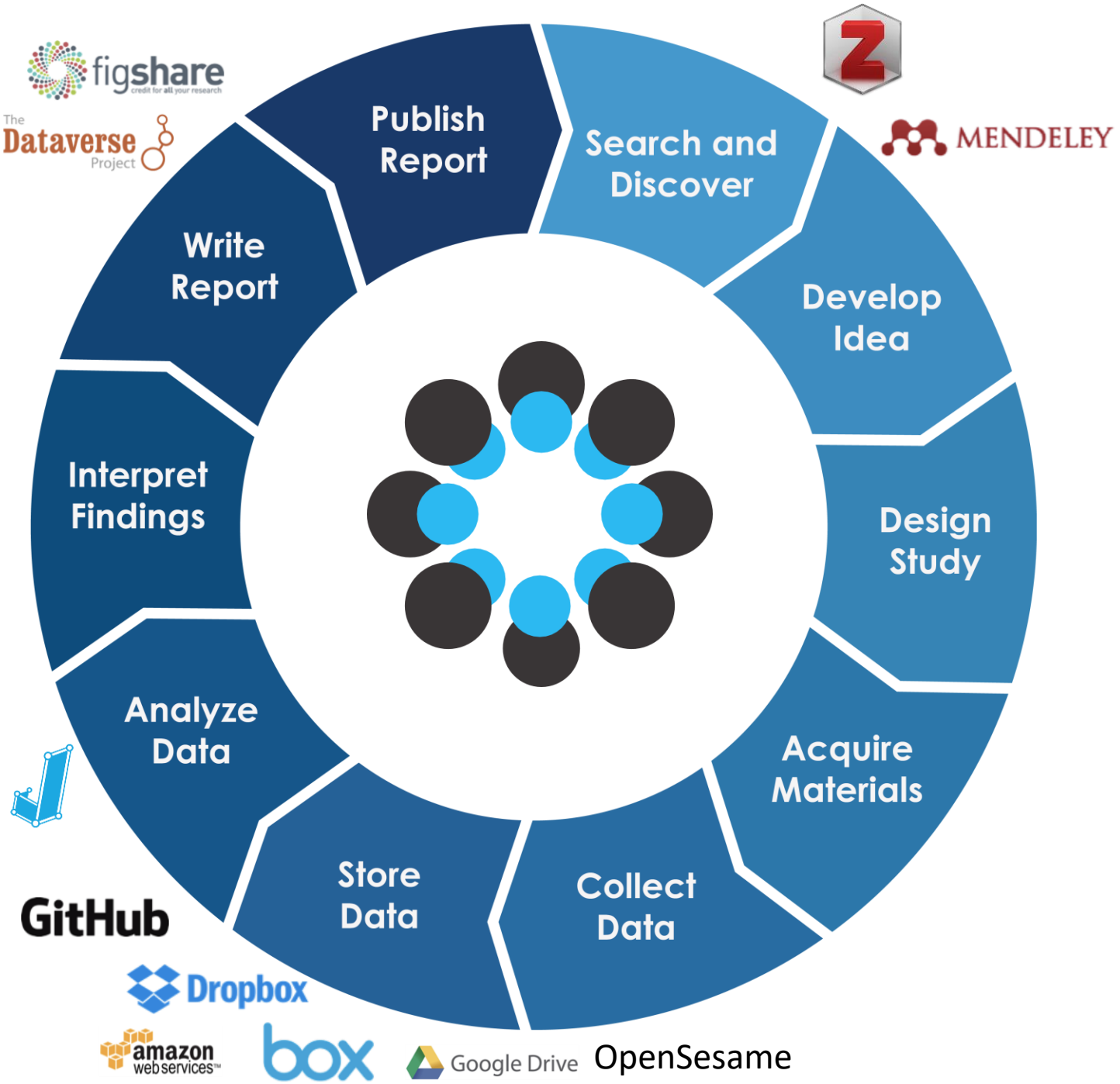
NYU

RIDIE
Registry for International
Development Impact Evaluations

Interfaces

OSF INSTITUTIONS
OSF PREPRINTS
OSF REGISTRIES
OSF COLLECTIONS

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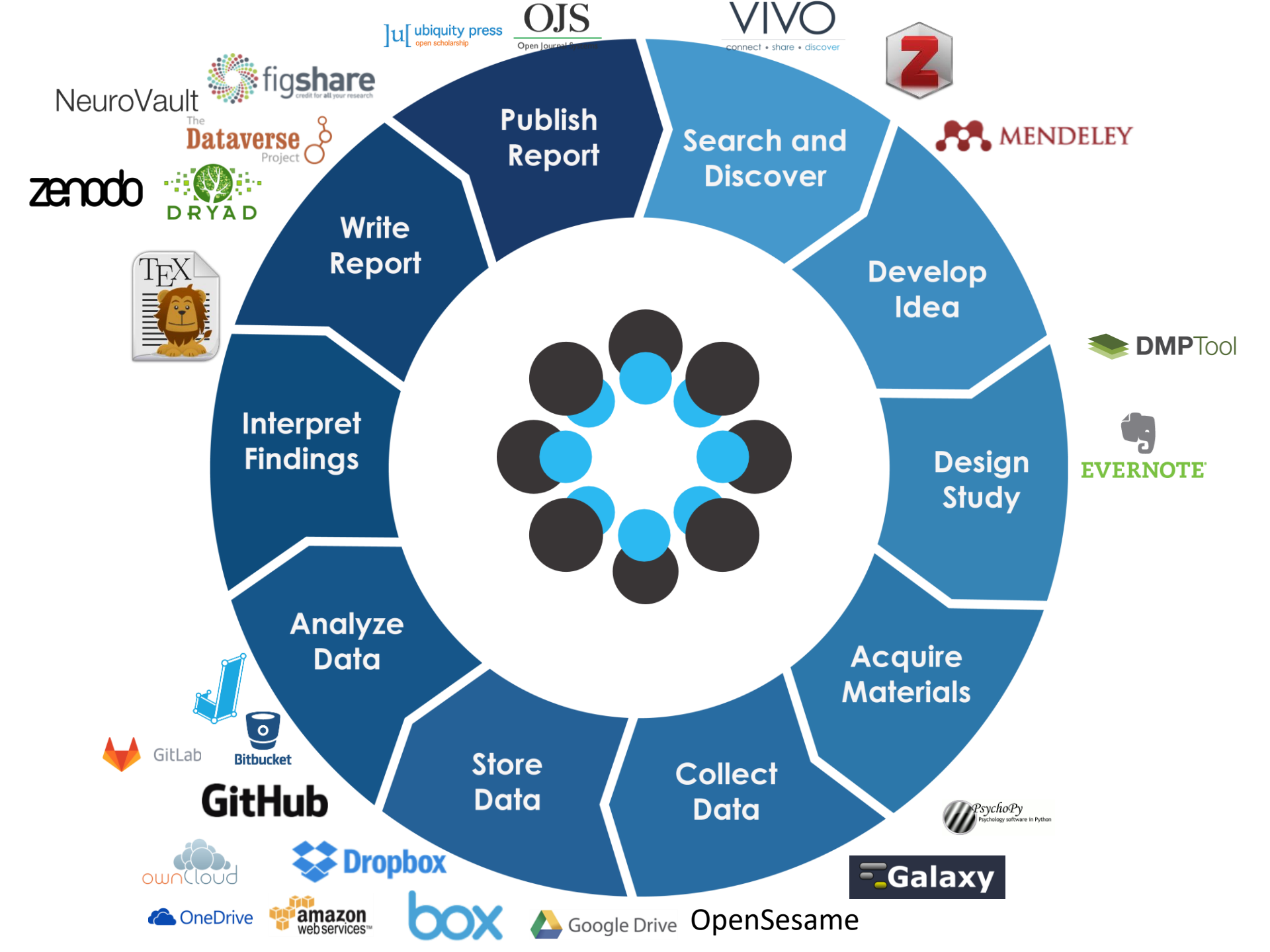
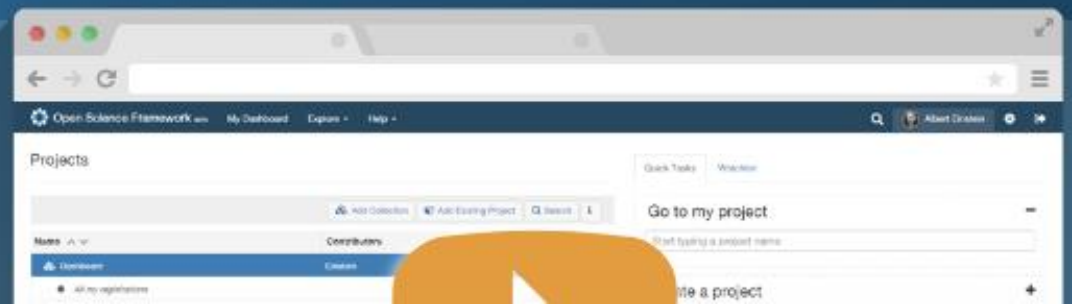
credit for all your research
The Dataverse Project
MENDELEY
Publish Report
Search and Discover
Develop Idea
Design Study
Acquire Materials
Collect Data
Store Data
Analyze Data
Interpret Findings
Write Report
GitHub
Dropbox
amazon web services
box
Google Drive
OpenSesame


Publish Report
Search and Discover
Develop Idea
Design Study
Acquire Materials
Collect Data
Store Data
Analyze Data
Interpret Findings
Write Report
ubiquity press
OJS
VIVO
connect • share • discover
NeuroVault
figshare
The Dataverse Project
zenodo
DRYAD
MENDELEY
DMPTool
EVERNOTE
TEX
GitLab
Bitbucket
GitHub
PsychoPy
Psychology software in Python
ownCloud
Dropbox
Galaxy
OneDrive
amazon web services
box
Google Drive
OpenSesame

Open Science Framework

Browse Support

http://osf.io



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OSF INSTITUTIONS

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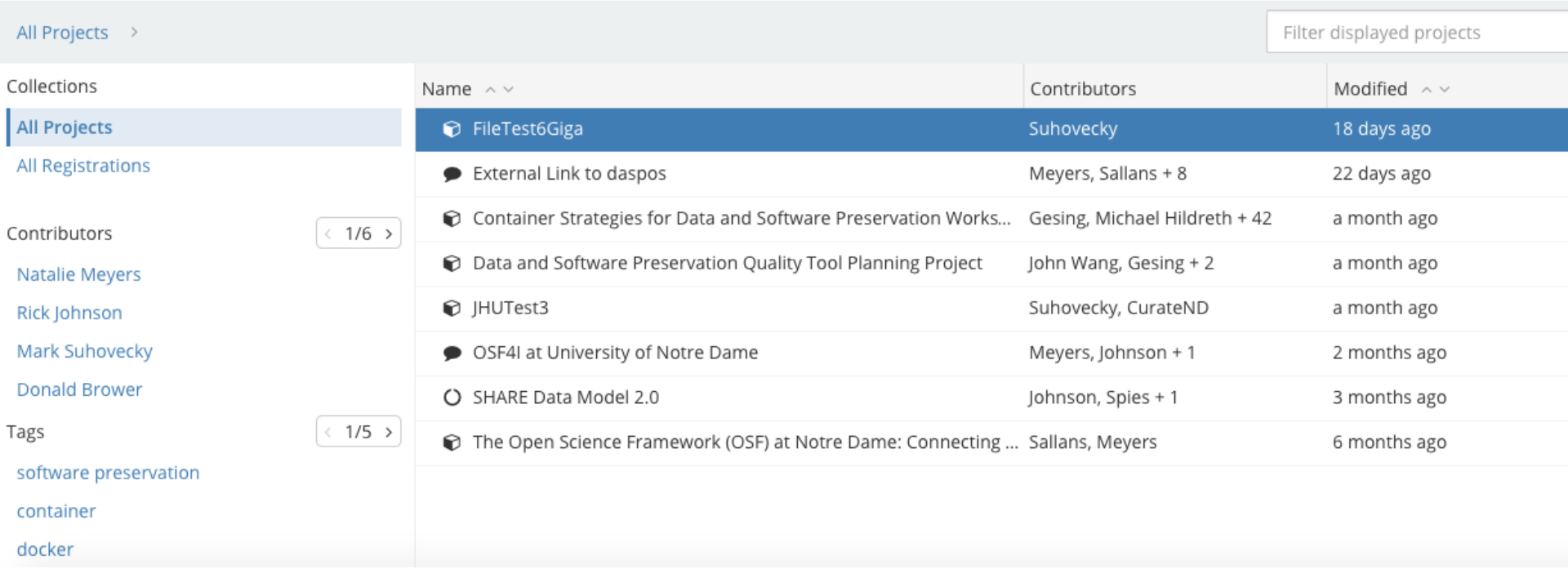

OSF INSTITUTIONS

Will be added soon:

And interest from 50+ research universities and organizations

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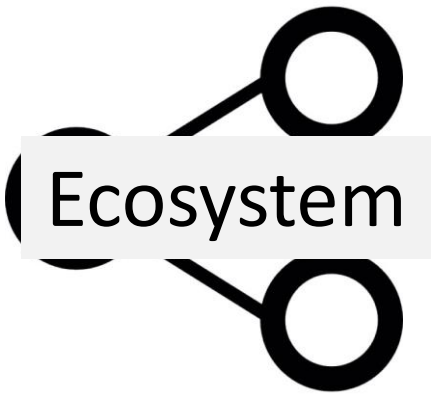
PREPRINTS

Technical Experts



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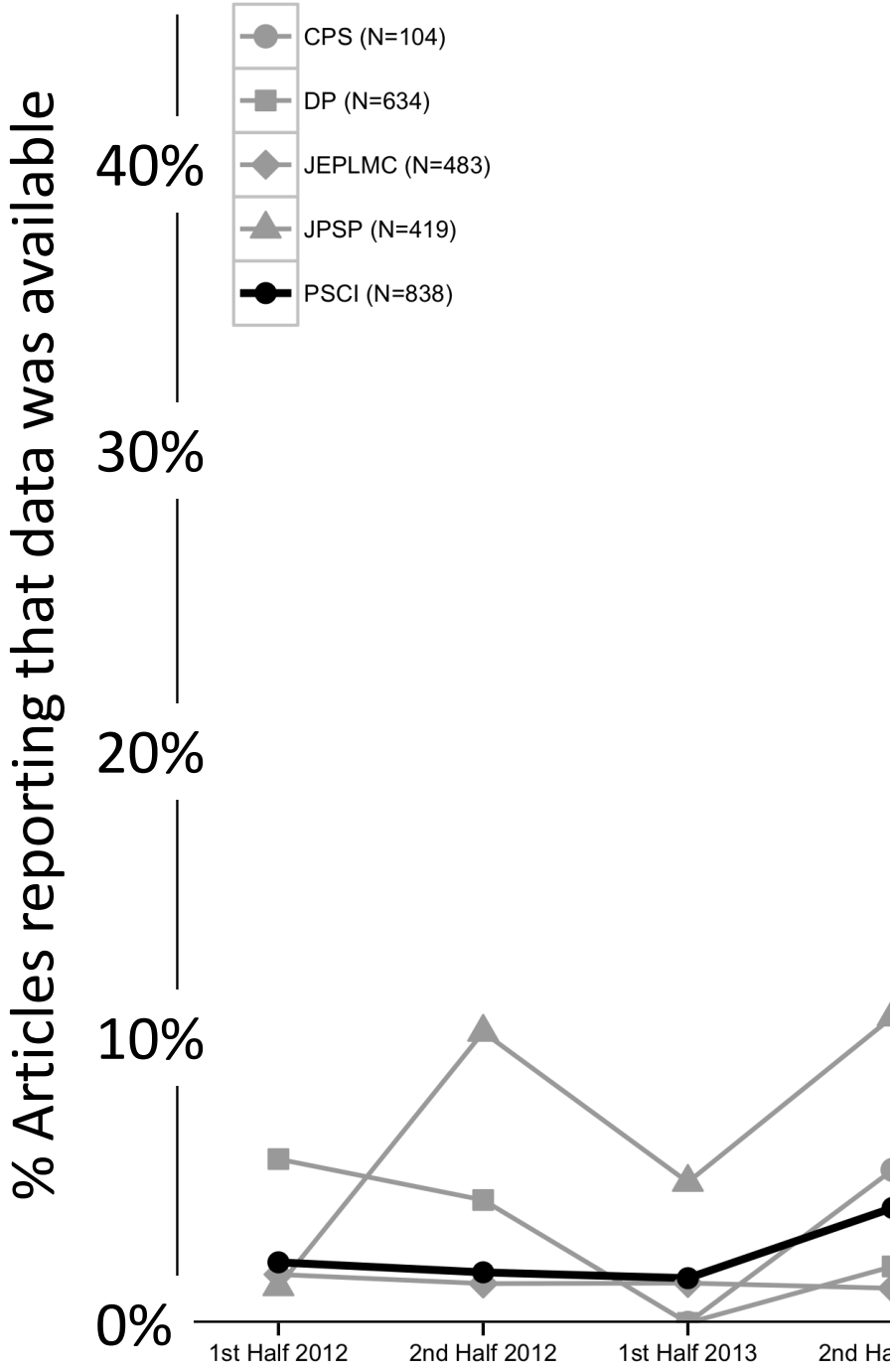
CPS (N=104)
DP (N=634)
JEPLMC (N=483)
JPSP (N=419)
PSCI (N=838)
% Articles reporting that data was available
40%
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1st Half 2012
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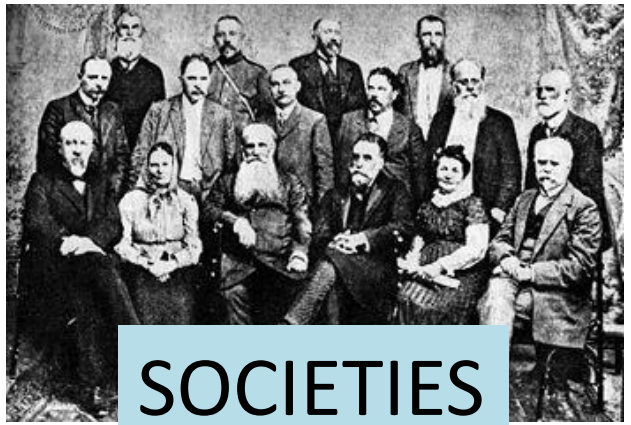
UNIVERSITIES

PUBLISHING

ecosystem

FUNDERS



SOCIETIES

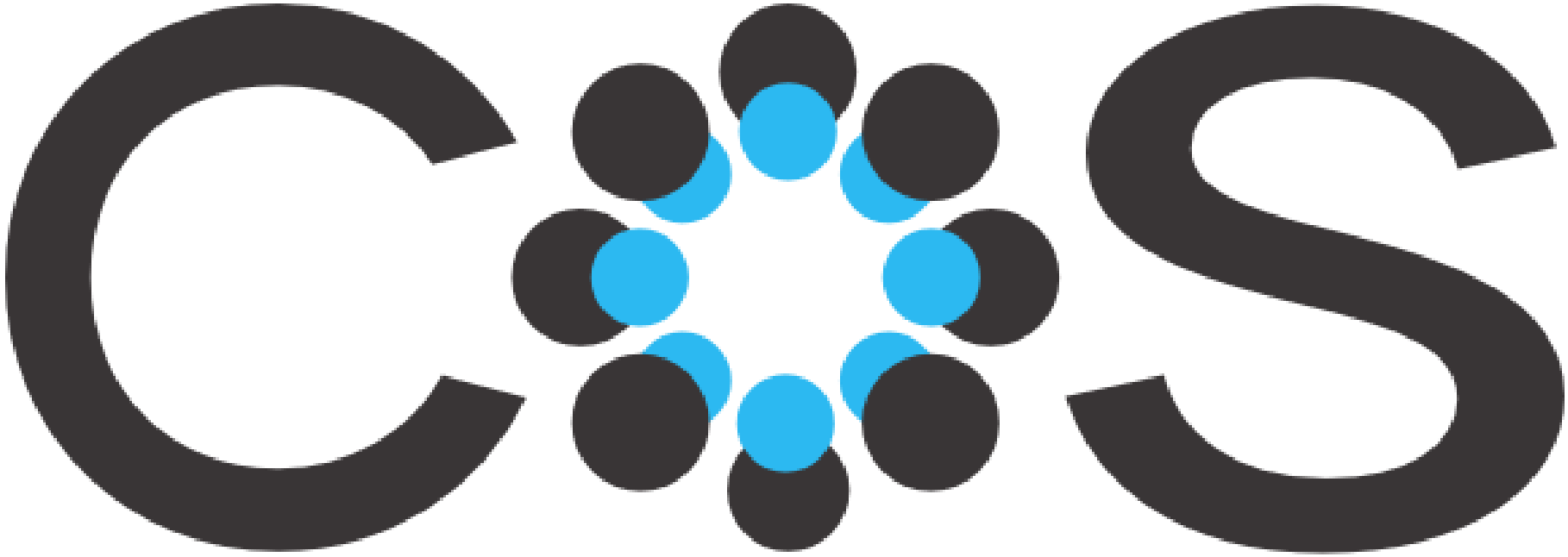
What can you do?

http://cos.io/

Take a picture

1. OSF Institutions for your researchers
2. Openness-Reproducibility Training Workshops
3. Encourage sharing preprints: http://engrxiv.org/
4. Consider incentives in hiring and promotion/tenure policies

Email: support@cos.io or nosek@virginia.edu



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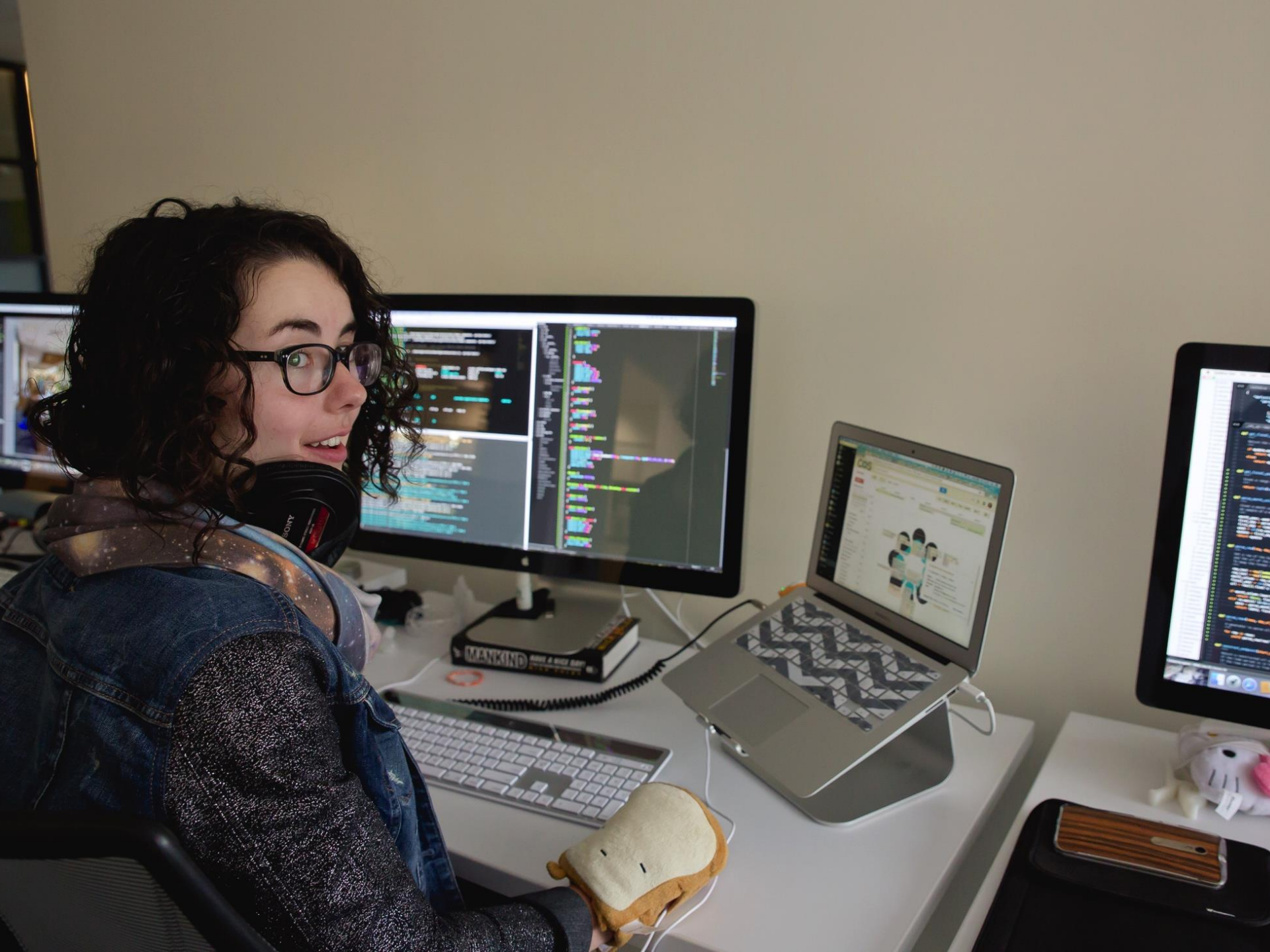
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