## **Contributor Growth** Strategies for OSS Projects

#### FOSSY Portland July 2023 Dr. Dawn M. Foster **Director of Data Science for CHAOSS**



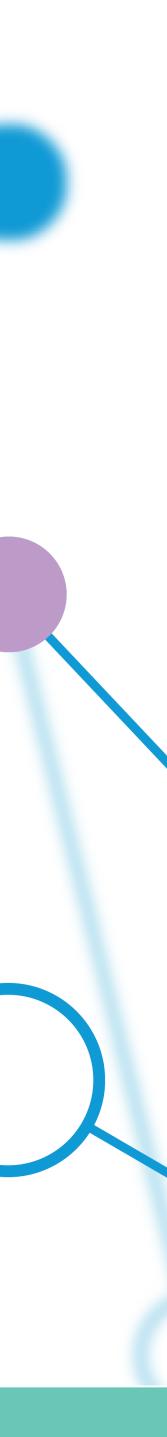


🔰 @CHAOSSproj





https://fastwonderblog.com/ https://github.com/geekygirldawn



### Thank you for the grant that funds my work

## ALFRED P. SLOAN FOUNDATION

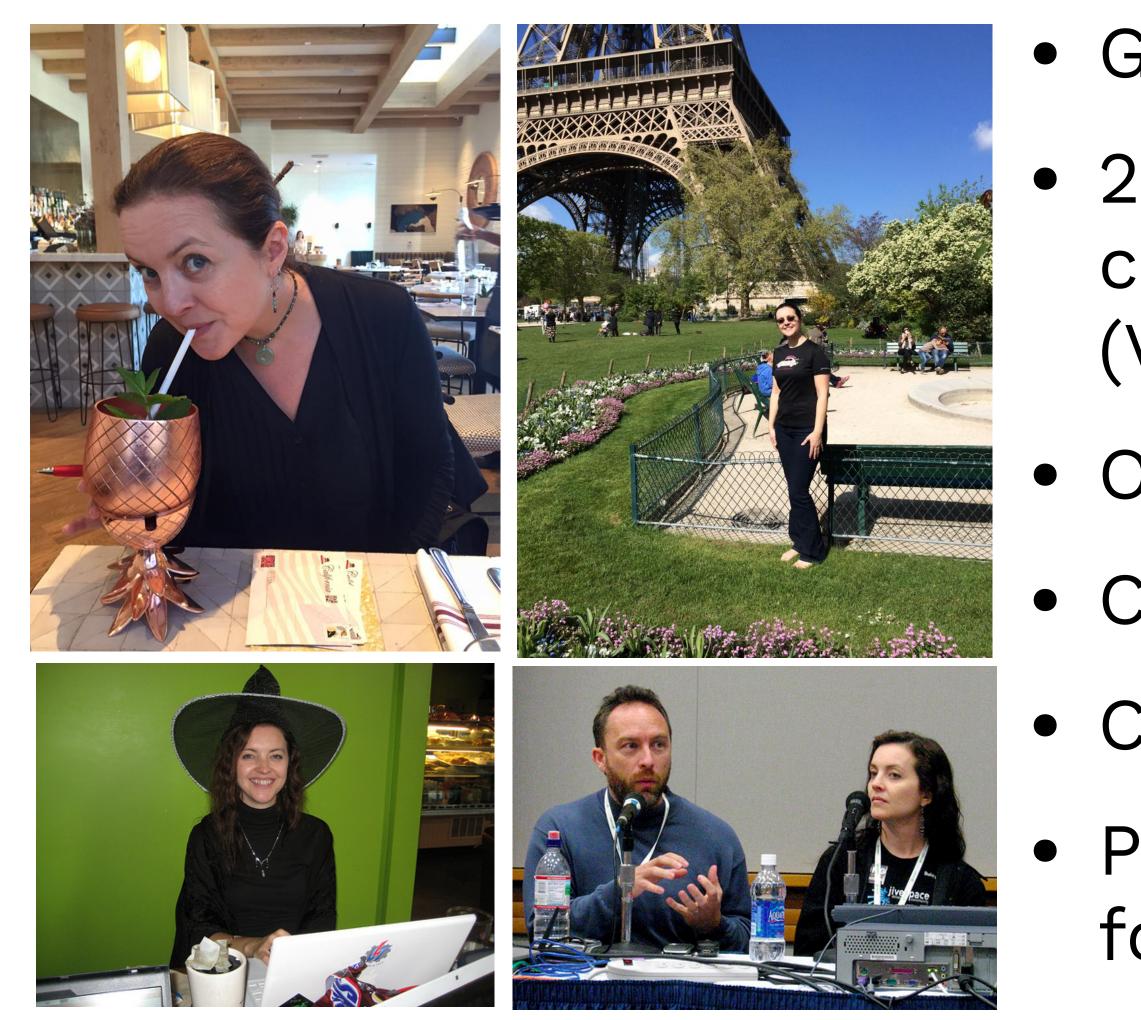








#### Whoami



Photos by Mom, <u>Josh Bancroft</u>, <u>Don Park</u>



- Geek, traveler, reader
- 20+ yr tech career focused on community & open source (VMware, Intel, Puppet, ...)
- OpenUK Board
- CHAOSS Board and Maintainer
- CNCF TAG Contrib Strategy co-chair
- PhD from the University of Greenwich focused on Linux kernel collaboration





#### The Problem is Hard

#### Humans are squishy. We have feelings and bad days.



#### Photo by <u>Magnet.me</u> on <u>Unsplash</u>





#### The Problem is Hard

#### Action: Be proactive and encourage people to participate.



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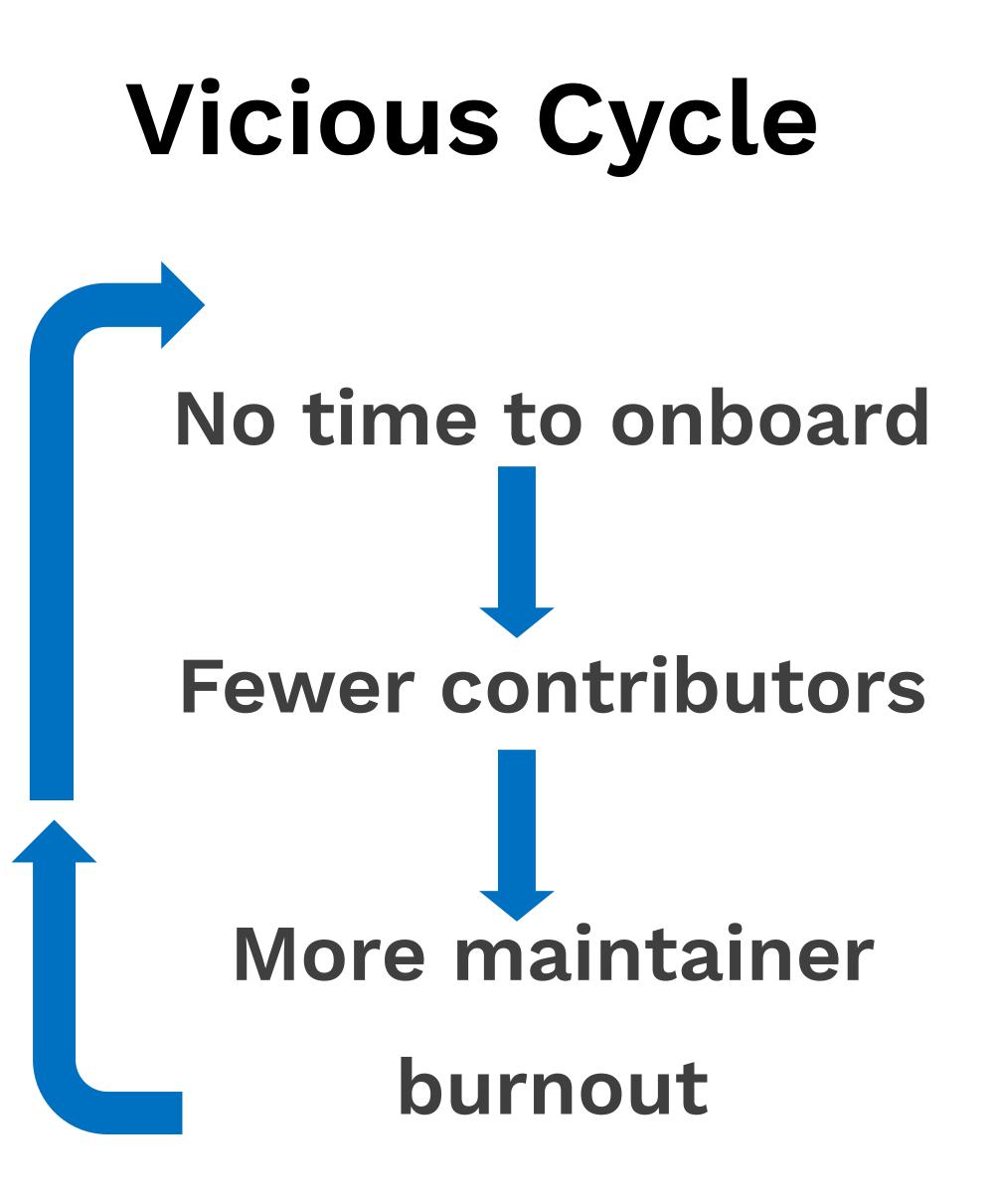






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 Factors that Impact Contributor Growth Contributor Growth Strategies Contributor Ladders and Leadership Metrics for Measuring Project Sustainability Resources and Final Thoughts

Photo by Marco Verch - CC BY 2.0



# **Developing and Executing on Contributor Growth Strategies**







#### Motivation

### Squishy humans have complex motivations. We want to feel useful and appreciated.

<u>contribute.cncf.io/maintainers/community/contributor-growth-framework/motivation</u>





YOU

GOT

THIS



#### Motivation

### **Action: Be proactive** and ask specific people for help on individual tasks.

<u>contribute.cncf.io/maintainers/community/contributor-growth-framework/motivation</u>





YOU

GOT

THIS



### Governance is all about the Humans Set expectations for how people collaborate & make decisions

<u>contribute.cncf.io/maintainers/templates/governance-intro</u>









### Governance is all about the Humans Action: Clearly document project governance (templates avail)

<u>contribute.cncf.io/maintainers/templates/governance-intro</u>







### **Be Explicit**

### Explicit, documented governance makes it easier for the humans to contribute.











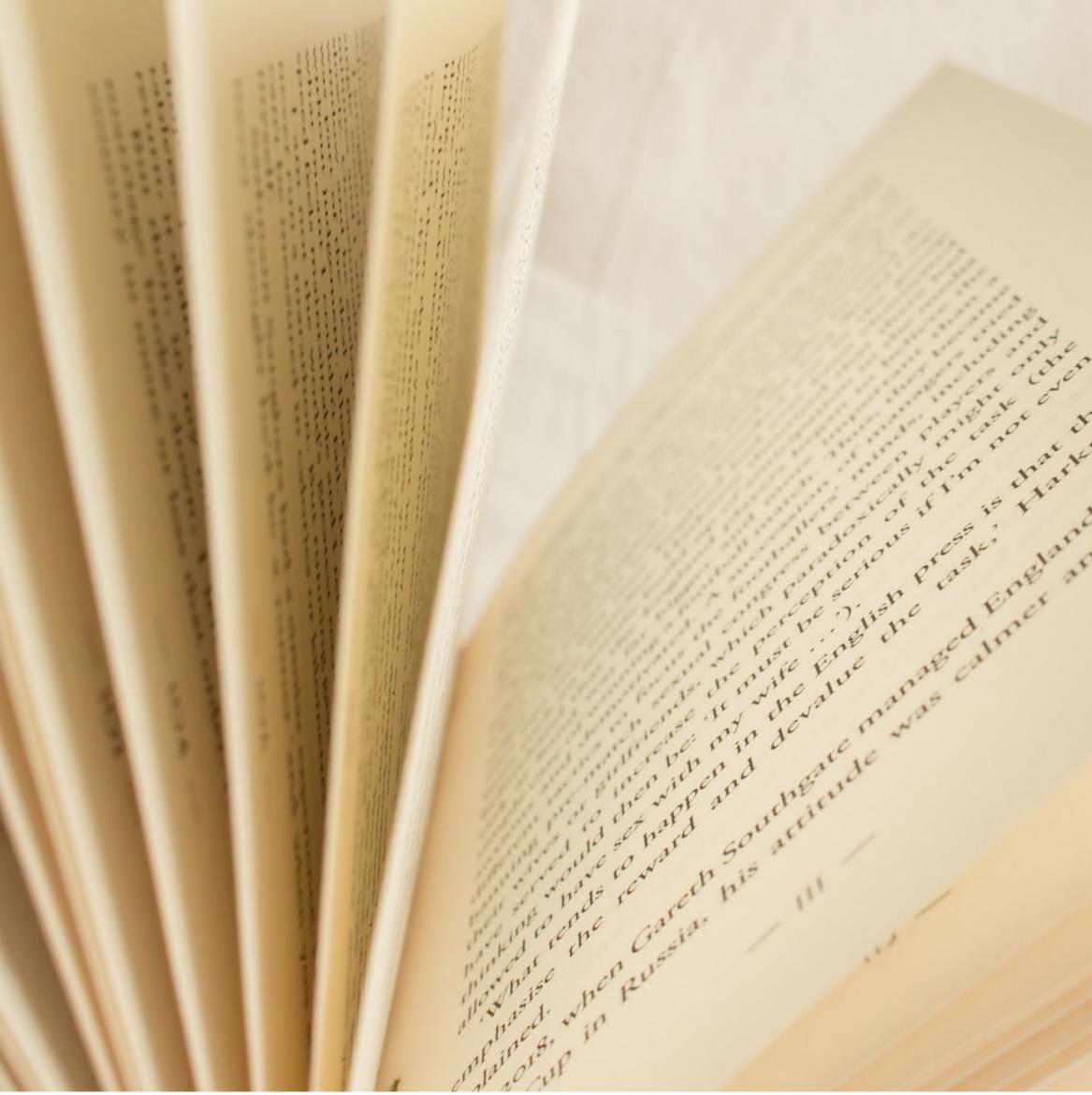
#### **Onboarding Docs**

### Good docs for onboarding new contributors is step #1 toward scaling maintainers.

<u>contribute.cncf.io/maintainers/templates/contributing/</u>



#### Photo by <u>Olga Tutunaru</u> on <u>Unsplash</u>





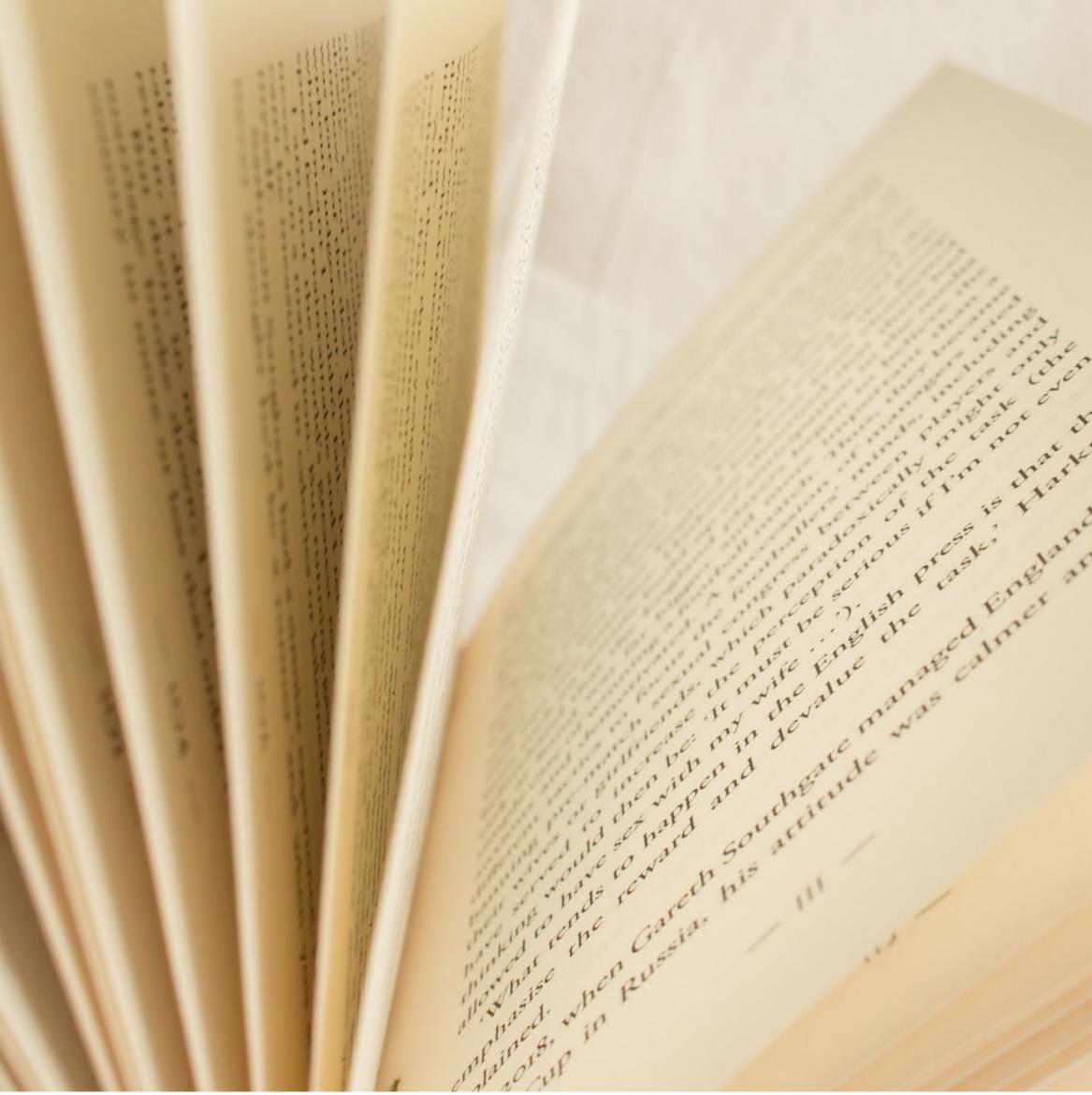
#### **Onboarding Docs**

### Action: Make sure to include dev env setup, running tests, and other requirements (template available).

contribute.cncf.io/maintainers/templates/contributing/



#### Photo by <u>Olga Tutunaru</u> on <u>Unsplash</u>





#### Diversity, Equity and Inclusion

## Build a welcoming and

# inclusive community.

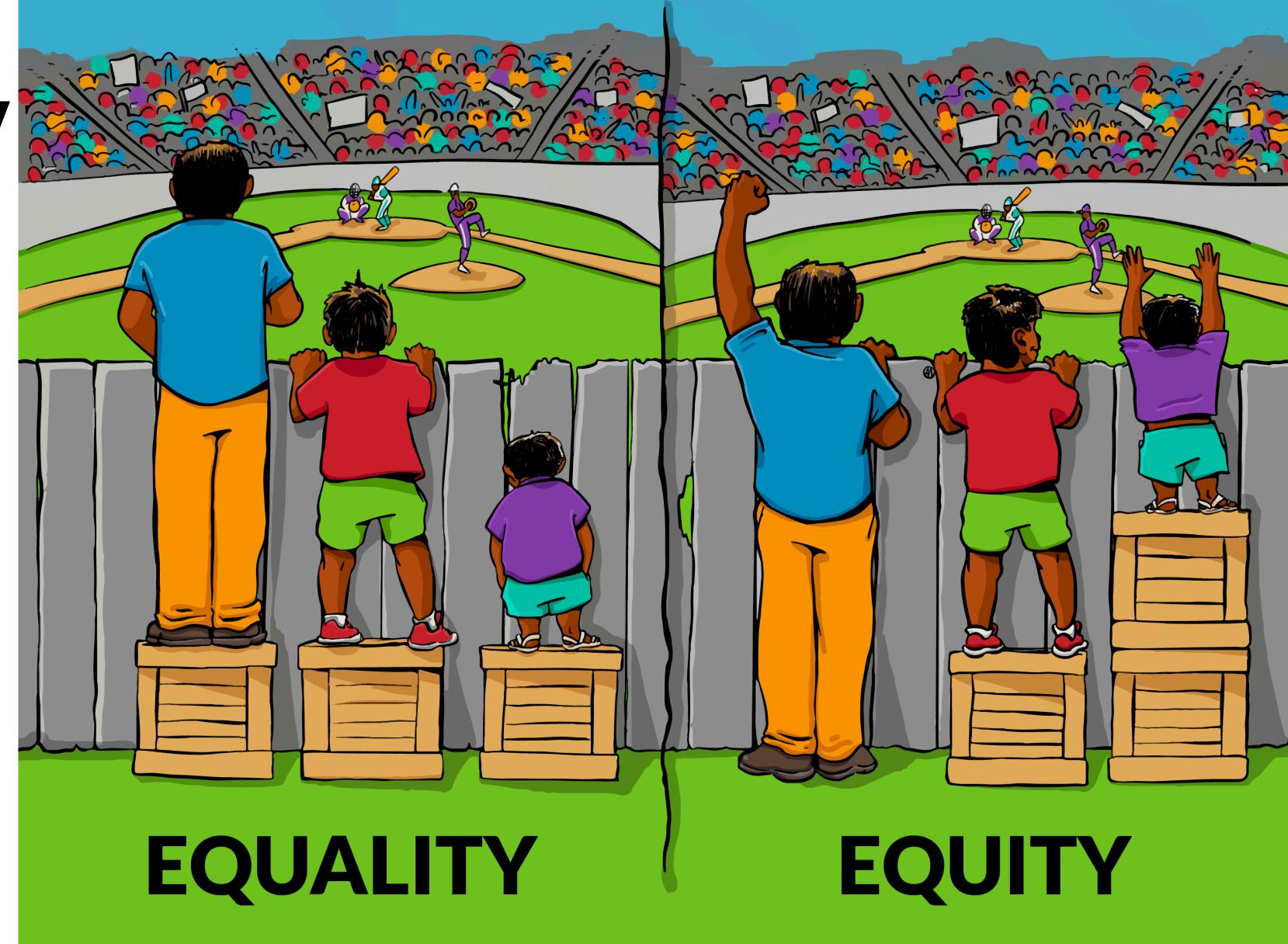


Image courtesy of the Interaction Institute for Social Change | Artist: Angus Maguire.







#### **Diversity, Equity** and Inclusion

### **Action: Be proactive** about including people and moving them into leadership roles.

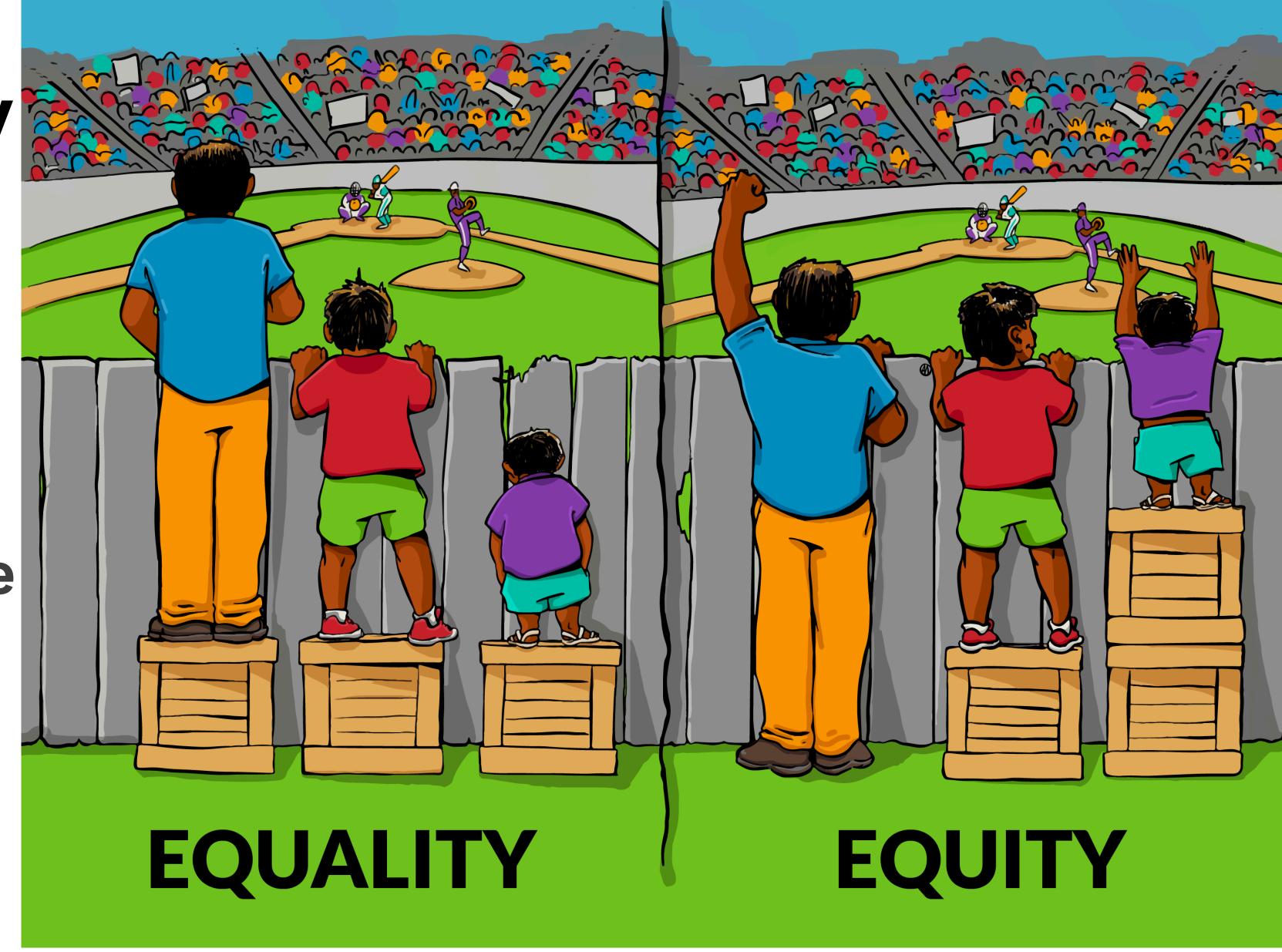


Image courtesy of the Interaction Institute for Social Change | Artist: Angus Maguire.







# **Contributor Ladders** and Leadership



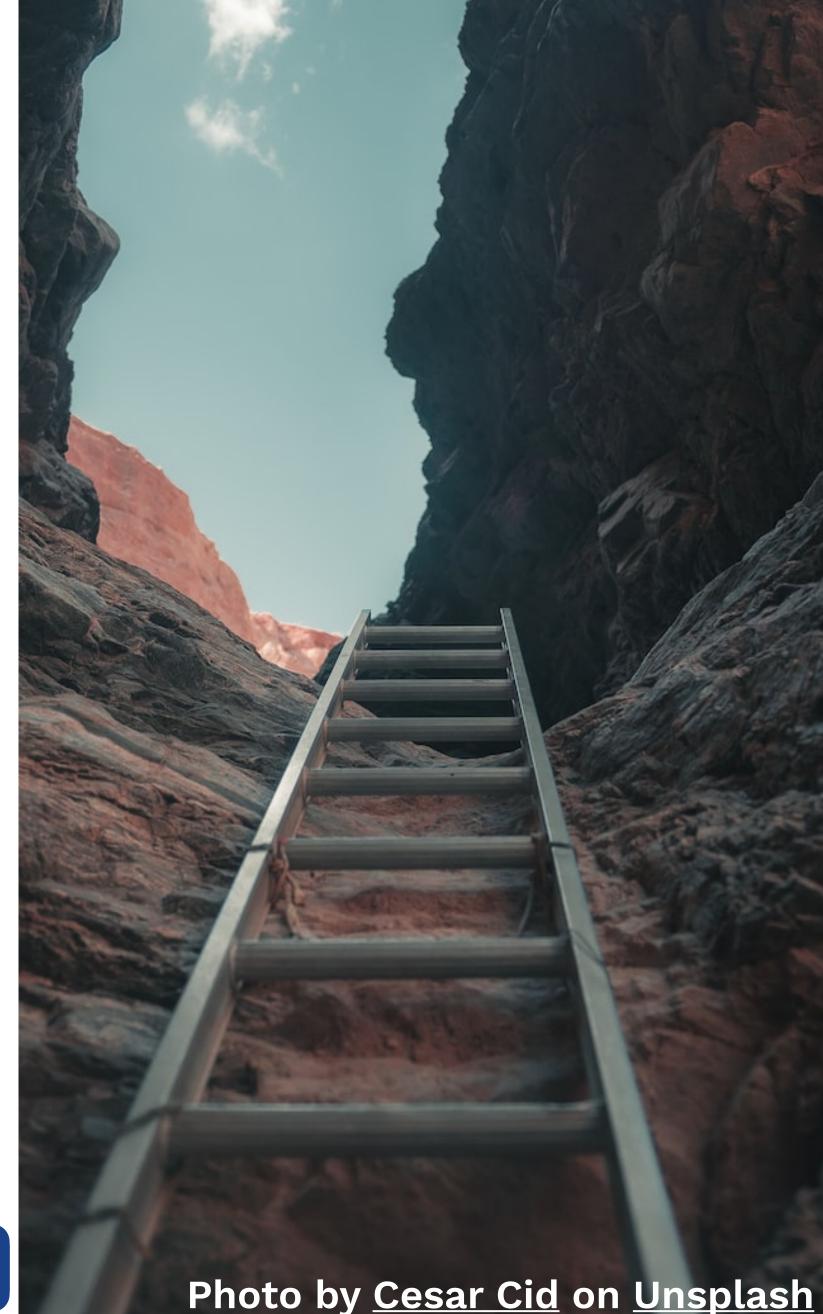


#### **Contributor Ladders**

### Defining a ladder of leadership roles helps recruit new humans to reduce maintainer workload.

github.com/cncf/project-template/blob/main/CONTRIBUTOR\_LADDER.md







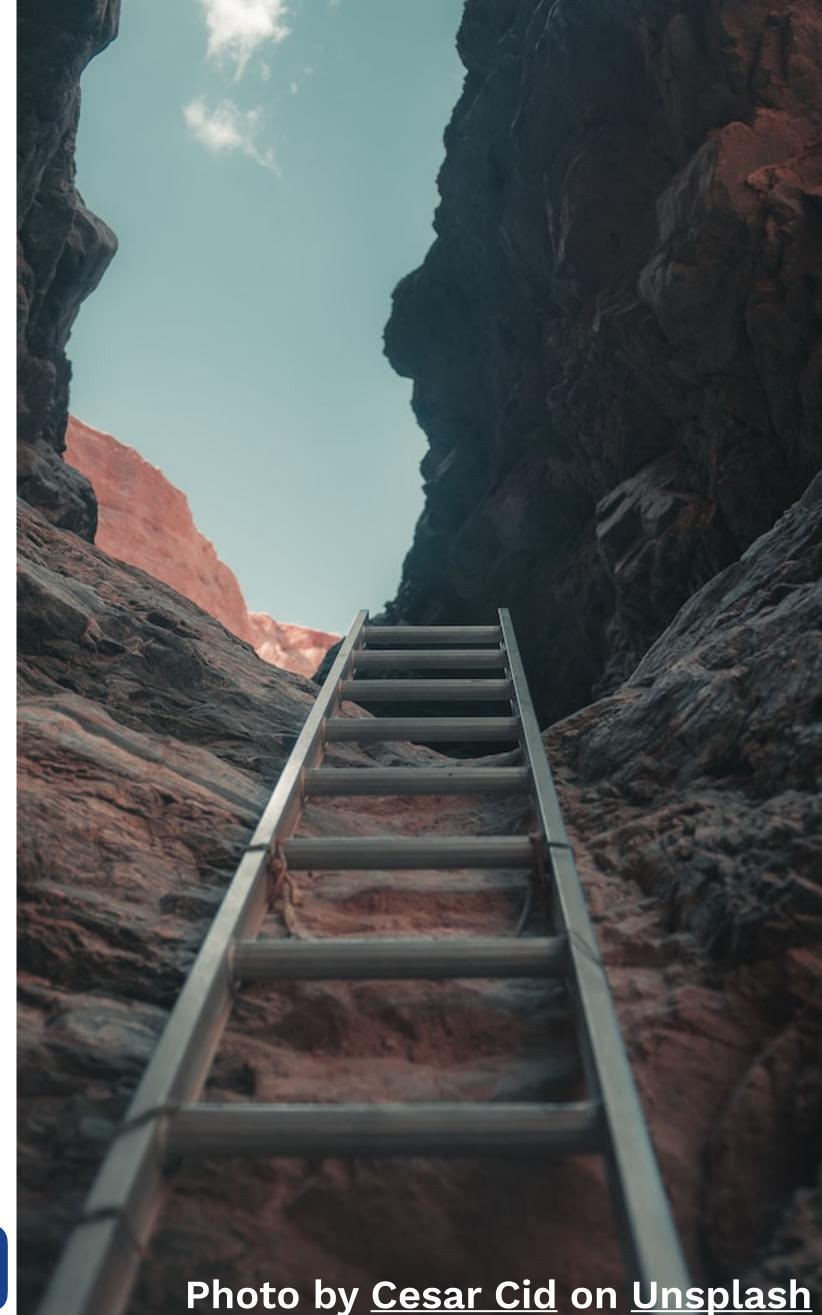


#### **Contributor Ladders**

### Action: proactively recruit new humans to move up the ladder into leadership roles (template available).

github.com/cncf/project-template/blob/main/CONTRIBUTOR\_LADDER.md









#### Leadership

### Humans can climb the ladder into leadership to reduce maintainer burden.



contribute.cncf.io/maintainers/governance/leadership-selection



#### Leadership

### **Action: Define** a fair and transparent process for how new leaders are selected.



contribute.cncf.io/maintainers/governance/leadership-selection



#### Mentoring

### Help the humans become more productive contributors.



*fithub.com/cncf/mentoring* 





#### Mentoring

### **Action: Carve out** time for mentoring, shadowing or 1:1 time with another human.









#### Emeritus as a Goal

#### Set your project up for success after maintainers move on.





#### Emeritus as a Goal

### Action: Be proactive about promoting new humans so that maintainers can move into emeritus roles.



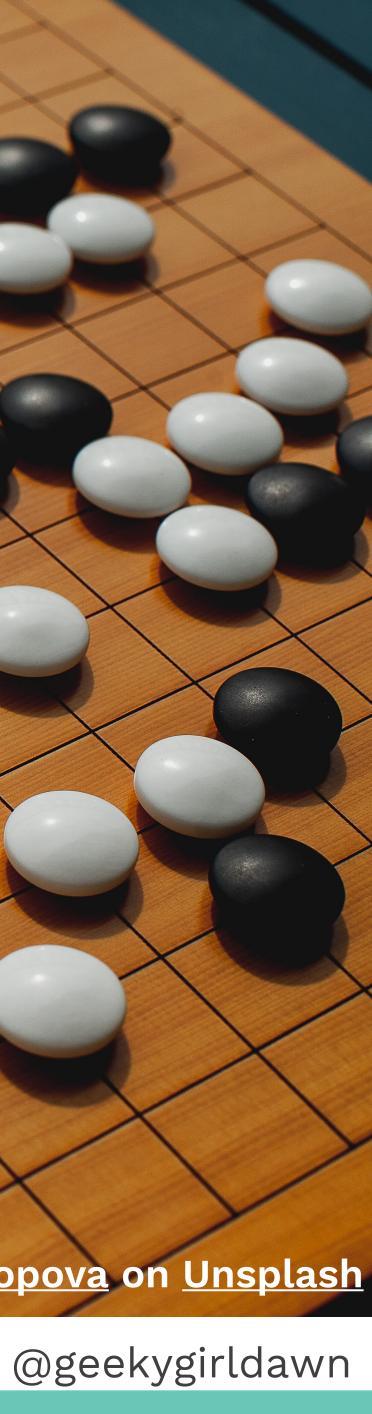


#### **Be Strategic**

#### Think about where you can best spend your time to grow your contributor base.



#### Photo by <u>Elena Popova</u> on <u>Unsplash</u>

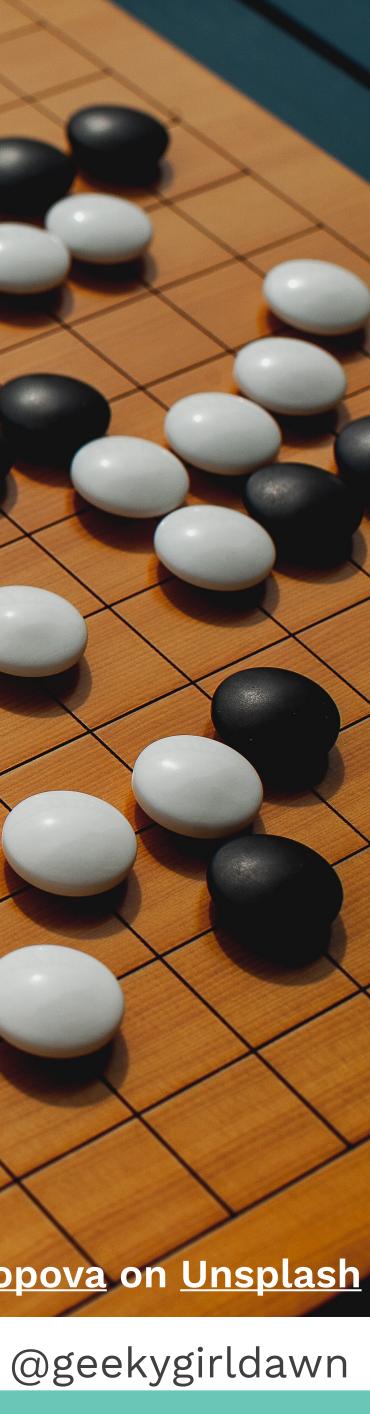


#### **Be Strategic**

### Action: Find people to help with documentation, marketing, community, and similar activities.

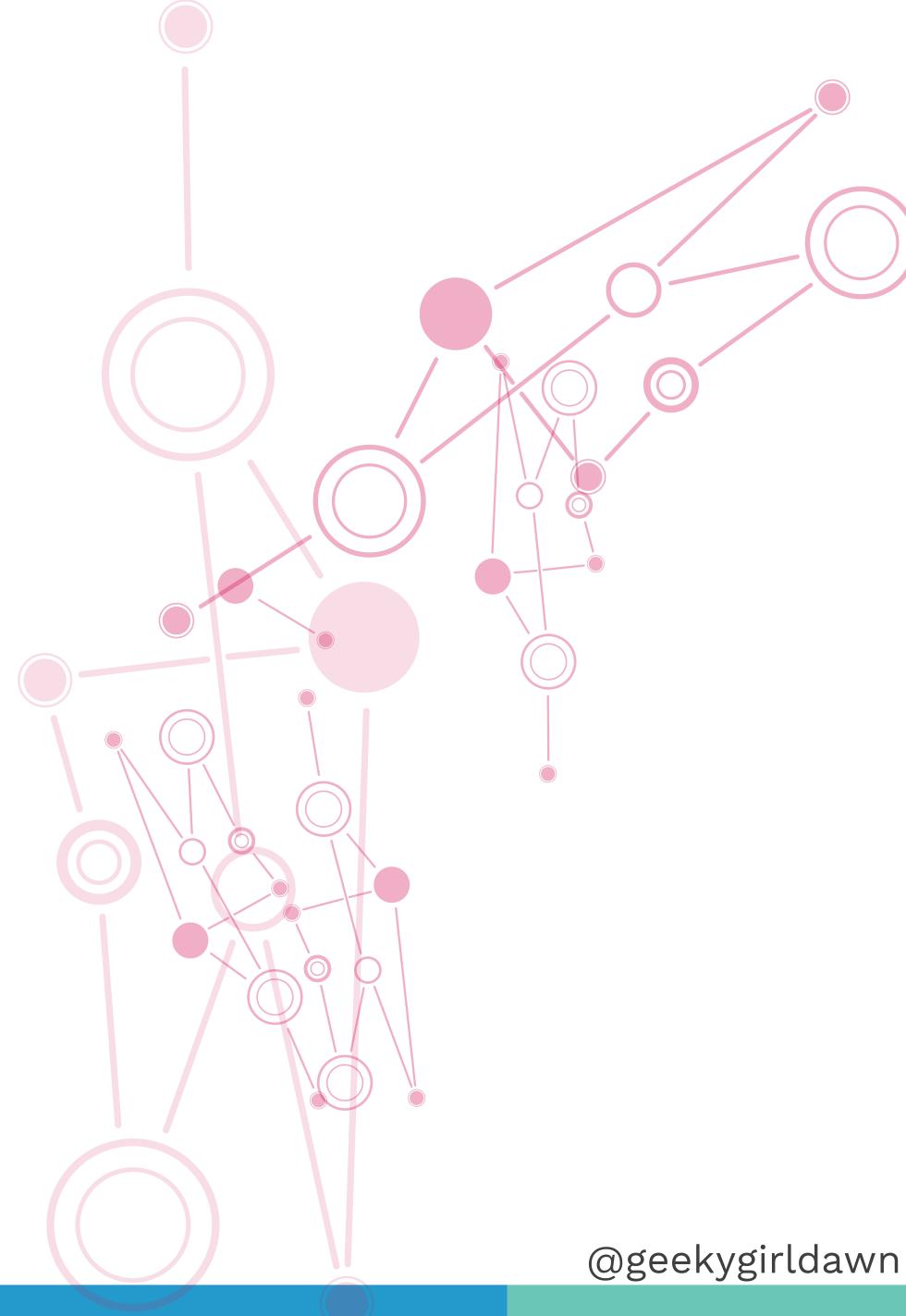


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# **Measuring Project** Sustainability



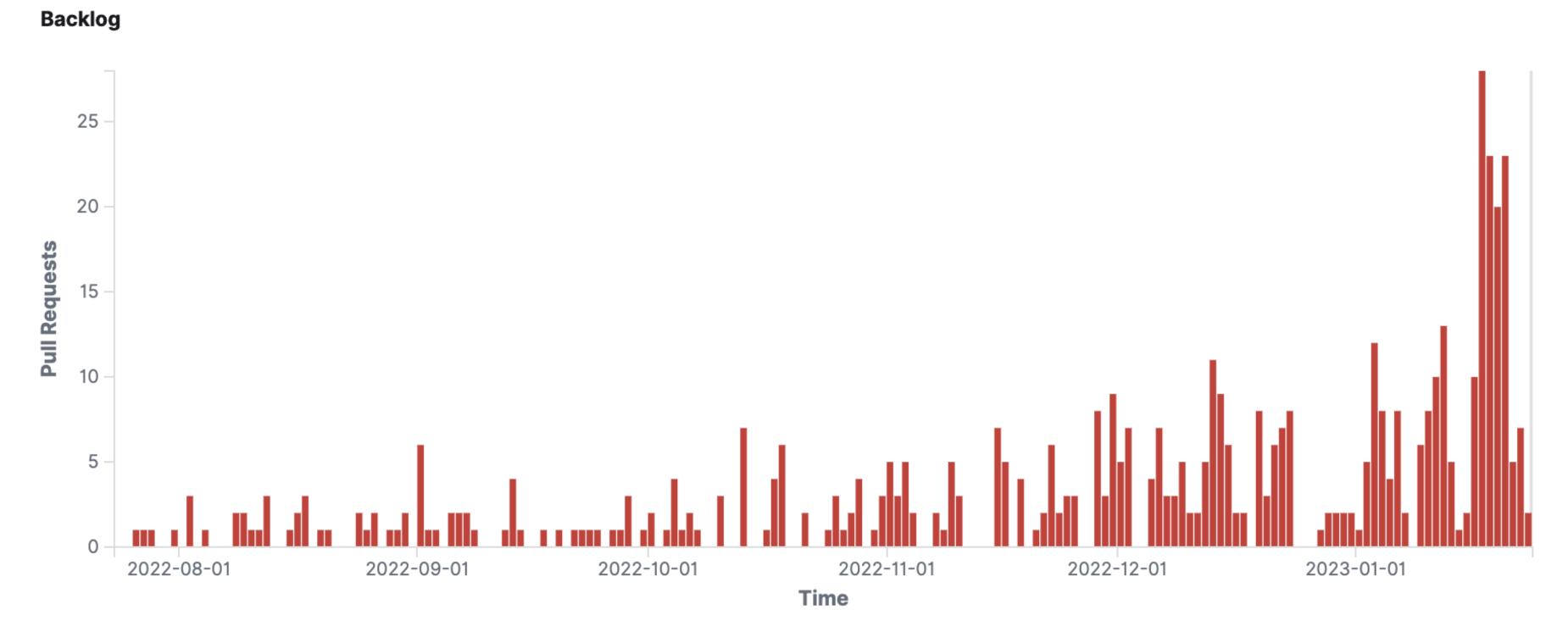






#### Responsiveness

#### Contributors submitting PRs with no one to resolve / close them -> may need to move more people into leadership.







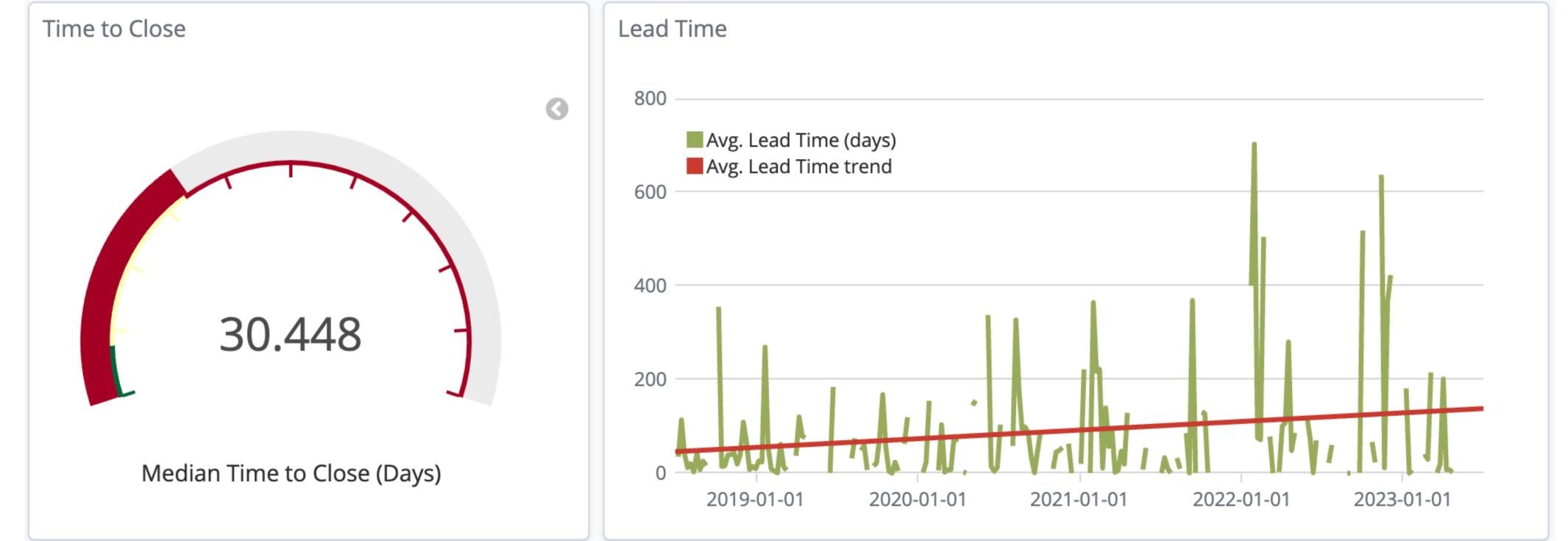






#### Responsiveness

#### Time it takes for maintainers to close PRs / issues is increasing -> may need to move more people into leadership.



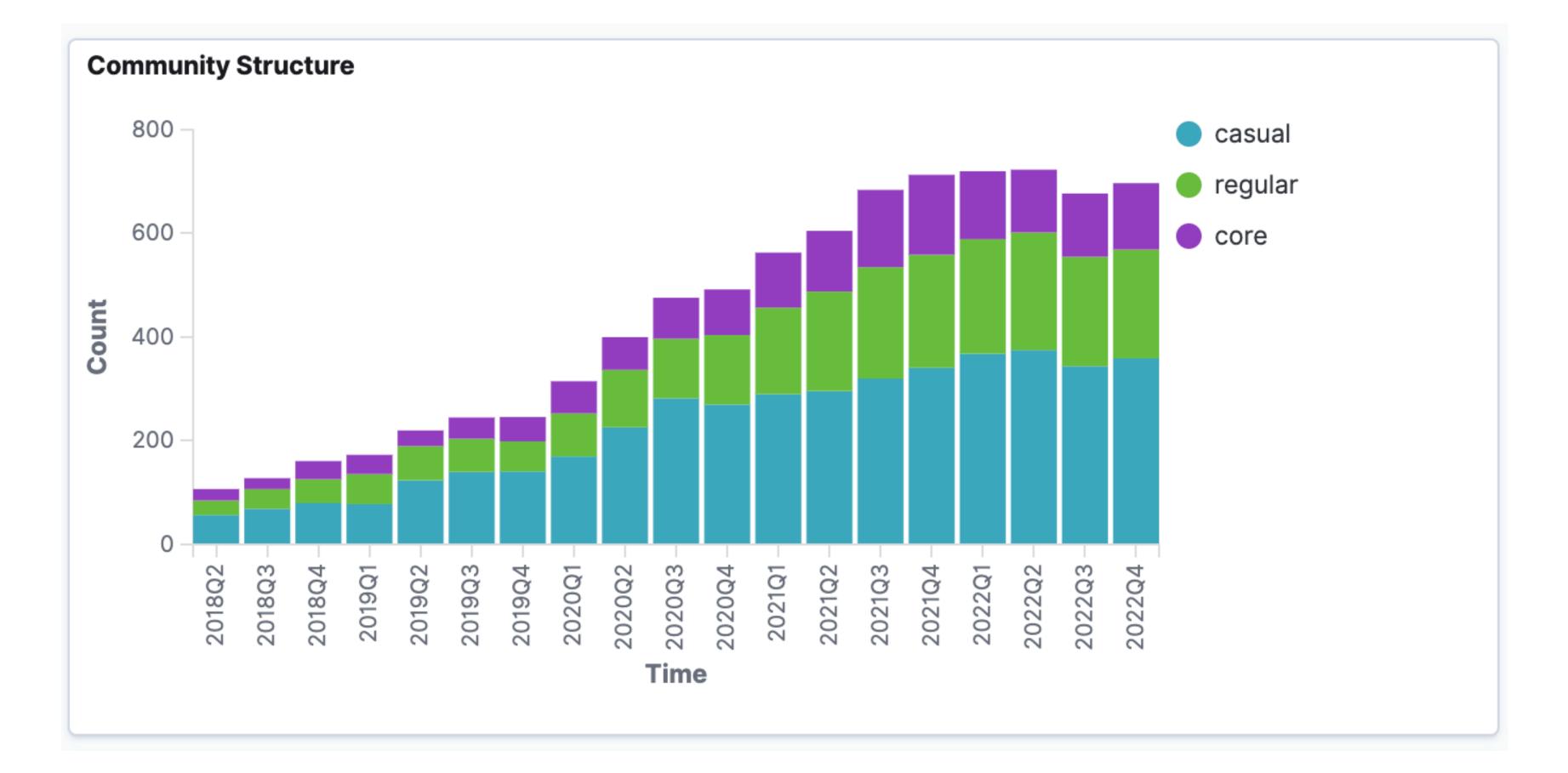








## **Types of Contributors** Few casual /regular contributors -> improve onboarding docs.



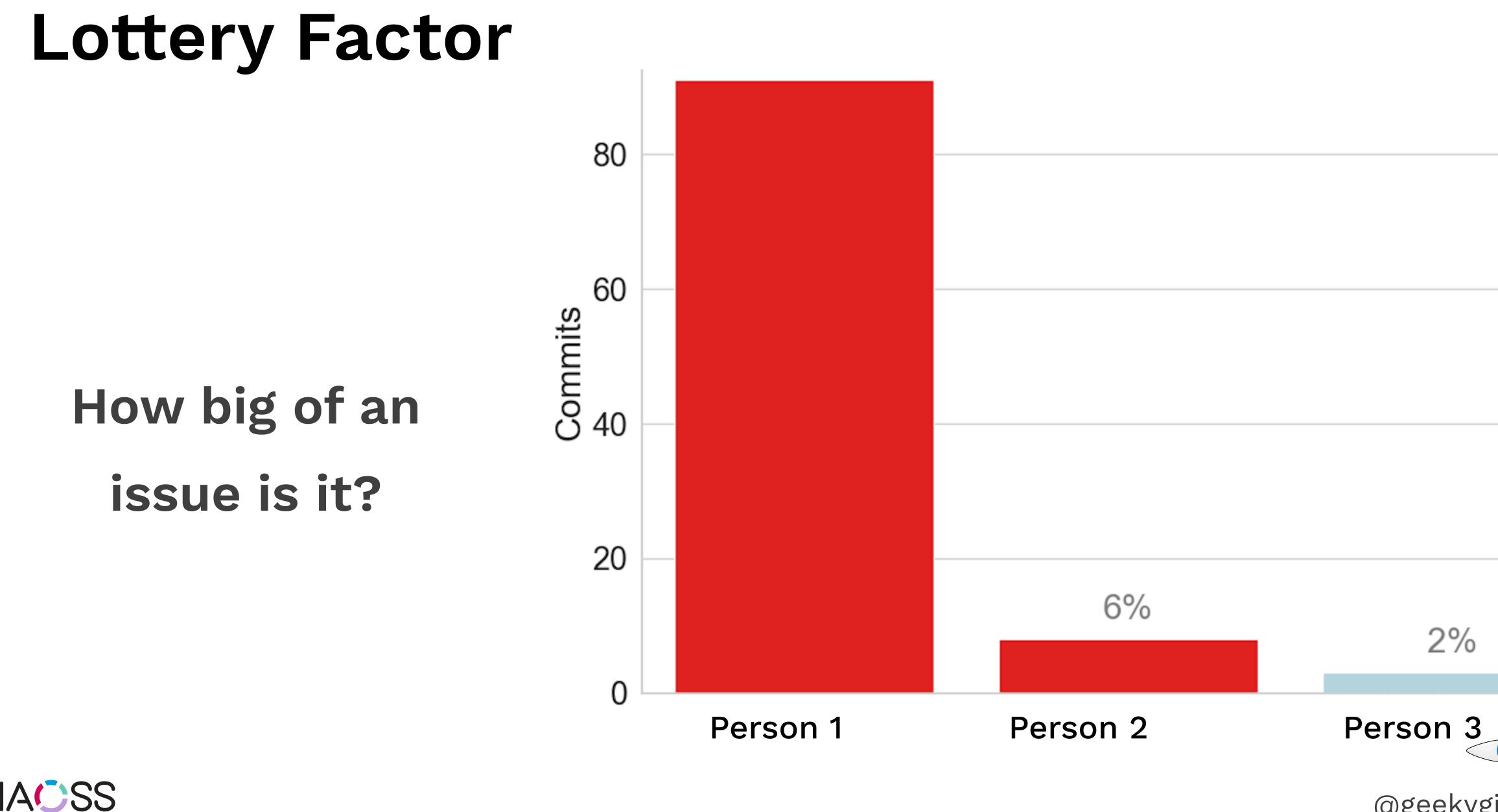




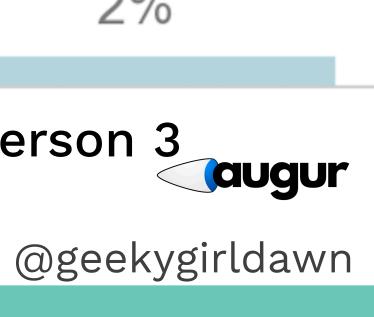






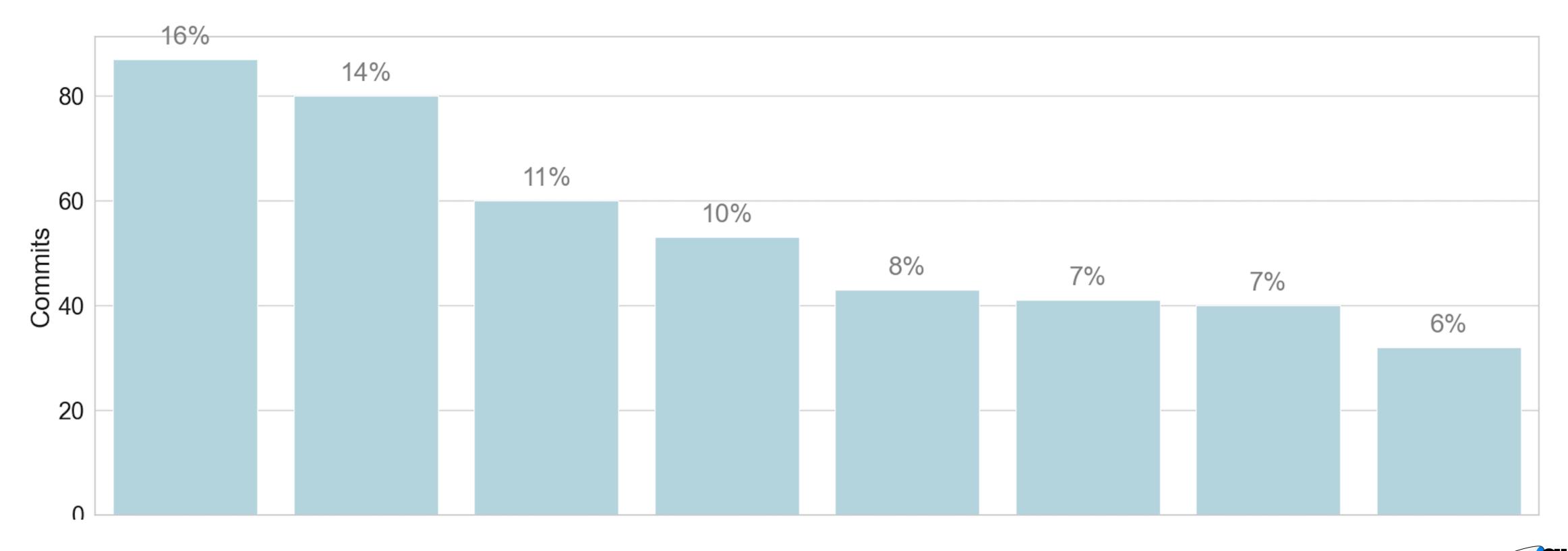






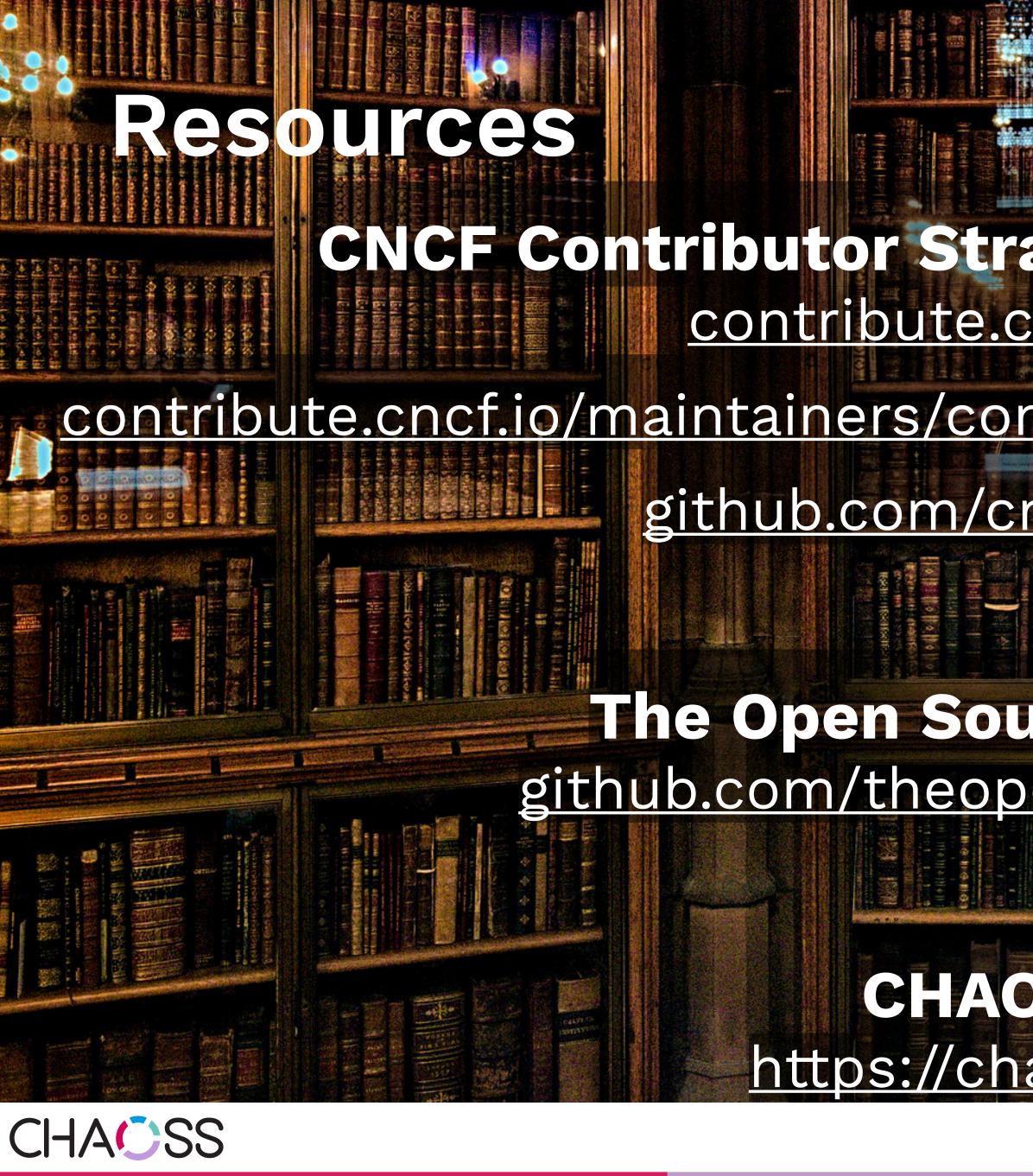
#### Lottery Factor

#### Who might be ready to move into a leadership position?









#### <u> Photo by Vicente – CC BY-NC-I</u>

#### CNCF Contributor Strategy TAG Docs & Templates contribute.cncf.io/maintainers/

#### <u>contribute.cncf.io/maintainers/community/contributor-growth-framework/</u>

<u>github.com/cncf/project-template</u>

#### The Open Source Way Guidebook github.com/theopensourceway/guidebook/

CHAOSS Metrics https://chaoss.community/



#### **CNCF TAG Contributor Strategy Needs more Humans**

#tag-contributor-strategy (CNCF Slack) Join our **Slack channel** 

Sign up for our **mailing list** <u>lists.cncf.io/g/cncf-tag-contributor-strateg</u>

Drop in to our **meetings** 

Go to cncf.io/calendar/ and search for contributor strategy!

Learn about the TAG and how to participate: <u>cncf.io/contributor-strategy</u>.











### Final Thoughts

### Humans can be difficult and growing your contributor base is hard. It takes time now, but it is worth it later.









#### Action Item

### Carve out 1 hour a week to improve contributor documentation or help someone learn something new.





# THANK YOU! Any Questions?



https://chaoss.community/

https://github.com/chaoss

@CHAOSSproj

https://github.com/geekygirldawn

@geekygirldawn



Proprietary Software Used: MacOS & Keynote

https://fastwonderblog.com/

