

Disrupting the Status Quo: Case for **Diversity** in Open Source

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Hello!

Vandana Singh

**About 20 years of research on OSS –
variety of settings - recent focus on
Diversity in OSS**

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Agenda

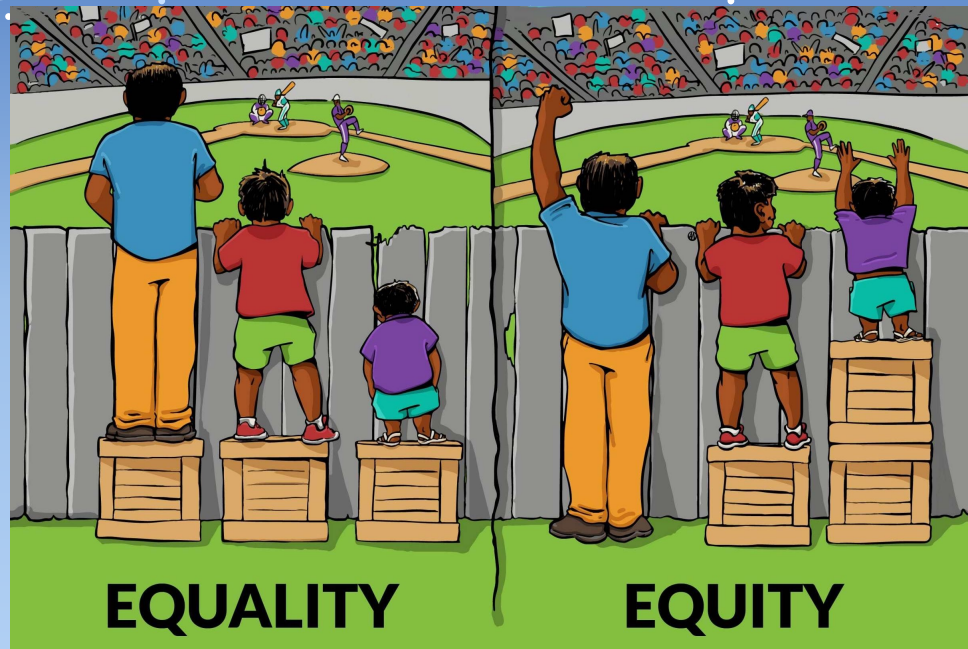
- Diversity in OSS – Why Bother?
- Actionable Results from my Research
- Current Diversity Initiatives in OSS
 - Challenges
- **Way forward**
 - What can we do as **individuals**?
 - What can **communities/community managers** do?

Definitions – DEI (Diversity, Equity and Inclusion)

- **Diversity:** The term diversity is used to describe **individual differences** (e.g. life experiences, learning and working styles, personality types) **and group/social differences** (e.g. race, socio-economic status, class, gender, sexual orientation, country of origin, ability, intellectual traditions and perspectives, as well as cultural, political, religious, and other affiliations)
- **Inclusion:** The term inclusion is used to describe the **active, intentional**, and ongoing engagement/**commitment** with diversity

Equality vs Equity

Equality is about dividing resources in matching amounts, and **Equity** focuses more on dividing resources proportionally to achieve a fair outcome for **ALL** involved.



- **Diversity is where everyone is invited to the party**
- **Equity means that everyone gets to contribute to the playlist**
- **Inclusion means that everyone has the opportunity to dance**



WHY DEI is important?

WHY DIVERSITY IN OSS?

Let's brainstorm...

Jamboard Link:

<https://jamboard.google.com/d/1m3-igoYPeMRpECBxeTbPdFIfyBeqVSzC3ZZHgjaQChg/edit?usp=sharing>

Screenshot of Jamboard

Diversity in OSS - Why does it matter?

A diverse set of contributors can bring more productivity to the team

Diversity improves the working experience even for existing community members

Technology will become more Human

software is more secure since neurodiversity yields better security

If we are not diverse, we're missing enormous swaths of the population as potential contributors/employees

OSS is the often the foundation for other software, and big-scale software needs to be scale/represent to the population.

open source is driver in science, and diversity of thought is critical to benefiting all people and cultures

Diversity helps in keeping people involved in the tech industry as a whole, especially those who are really talented but are not well represented. Otherwise they will leave the industry. That hurts OSS.

Complete and better thought out solutions

More empathy

More inclusion

More diversity means better cross-disciplinary integration.

this is open source, for everyone, no matter who are you and where are you from. It is for anyone, and anyone should be enabled to work together on the project

Diversity means less people will feel lonely, more people will feel represented

Diversity means we're closer to what the real world looks like

to get a variety of thought process

More povs to check for bugs, pitfalls and use cases

More diversity means outcomes that are more effective for everyone.

Diversity of role models is necessary for people to feel included.

Can help to improve the accessibility of the project to different audiences

We grow both our contributor base and our user base by bringing a larger pool of people into the process.

It's just the right thing to do.

In software, diverse opinions can better target a wider net of users and invite them to use your products

Attract and retain talent to contribute to the projects.

It's the right thing to do. (hard stop)

Group think rarely leads to the best solution. Diverse perspectives lead to improved solutions. Everyone wins...and wins more together.

Design better products. Designing a product in US for people in Africa doesn't work without participation from real users.

Unbiased softwares - Fairer experiences

To ensure open source is open to all.

Learning and collaboration means we grow as human beings. We are challenged.

Impossible for design for what you cannot understand

Different backgrounds can get different approaches

That's how Open Source works

Better Opportunities

“Women make more than 51% of the US work force, more than 20% of the tech work force and less than 2-3 % of the OSS community; these numbers have been stagnant for last two decades; ”



Why Diversity in OSS?

- ❖ Right now it looks pretty bad
 - ❖ The numbers are horrible
 - ❖ The experiences that are being highlighted are mostly negative
- ❖ The bottom line is hurting
 - ❖ More and more jobs in IT and not enough qualified people – women can help with that!
- ❖ Diversity is great for innovation!
 - ❖ Supporting diversity is in favor of creating innovative software
- ❖ Women USE the software – if they had equal say in **CREATING** it, the products will be more successful



Why do women care?

- ❖ They are missing out on benefits and opportunities that men avail from participating in OSS communities
- ❖ Learning new skills
 - ❖ Programming, Testing, UX, etc.
 - ❖ People/software management
- ❖ Networking and Connections
- ❖ Job opportunities
- ❖ Documented experience
- ❖ Knowledge!



Why Diversity in OSS?

- OSS has a bad reputation: Anecdotal evidence (blogs and forums) and Research show “hostile, discriminatory and predatory” experience of women and underrepresented minorities (URMs).



My Research

Results and Ongoing Projects

For list of published articles please see:

<https://sis.utk.edu/vandana/women-in-oss>

Motivated and Capable but No Space for Error – Women's Experiences of Contributing to Open Source Software

- **Methodology:** Surveys and Interviews



Key Takeaways:

- All women impacted by the underrepresentation of women and feel isolated.
- First experience with OSS was critical; often a “welcome person” made it a positive experience. **Mentors + Safe Spaces**
- Coding is NOT the only thing you can contribute.
- **Codes of Conduct** are important!!
- Women have to prove themselves and work extra to justify



Women Only Spaces – “Safe Spaces”

- **Methodology:** Website Content Analysis



Key Takeaways

- No Standardized spaces or activities
- Activities such as increasing the visibility of active women, connecting mentors, opportunities for collaboration, organization of events, educational opportunities and **spaces for social support**

Women supporting each other in OSS

- **Methodology:** Forums Content Analysis (5 forums, 10698 messages and 1,344 participants)



- **Key Takeaways - “safe spaces”** In these spaces, women receive and provide social support, emotional support, informational support and technical support.
- Help each other to succeed in the hostile OSS environment by sharing experiences, expertise and opportunities.
- Women only spaces foster gender diversity by women supporting each other.

Codes of Conduct and their role in OSS

- **Methodology:** Forums Content Analysis



Key Takeaways

- Codes of Conduct are important; customized are better
- Declare your take support for minorities (Specify separate harassment procedures)
- Enforcement planning is critical
 - Conflict of Interest, Visibility of Enforcement, Include women in governance.



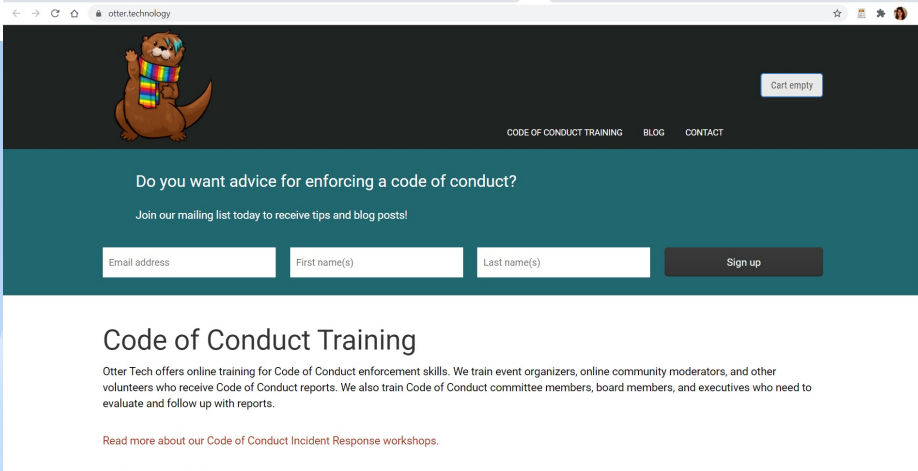


Codes of conduct in Open Source Software—for warm and fuzzy feelings or equality in community?

Vandana Singh¹ · Brice Bongiovanni¹ · William Brandon¹

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A screenshot of the Otter Tech website. The browser address bar shows "otter.techology". The website has a dark header with a cartoon otter wearing a rainbow scarf on the left and a "Cart empty" button on the right. Navigation links for "CODE OF CONDUCT TRAINING", "BLOG", and "CONTACT" are in the center. The main content area has a teal background with the heading "Do you want advice for enforcing a code of conduct?" and a subtext "Join our mailing list today to receive tips and blog posts!". Below this are three input fields for "Email address", "First name(s)", and "Last name(s)", followed by a "Sign up" button. The bottom section is white with the heading "Code of Conduct Training" and a paragraph about online training for Code of Conduct enforcement skills. A link "Read more about our Code of Conduct Incident Response workshops." is at the bottom.

otter.techology

Cart empty

CODE OF CONDUCT TRAINING BLOG CONTACT

Do you want advice for enforcing a code of conduct?

Join our mailing list today to receive tips and blog posts!

Email address First name(s) Last name(s) Sign up

Code of Conduct Training

Otter Tech offers online training for Code of Conduct enforcement skills. We train event organizers, online community moderators, and other volunteers who receive Code of Conduct reports. We also train Code of Conduct committee members, board members, and executives who need to evaluate and follow up with reports.

[Read more about our Code of Conduct Incident Response workshops.](#)

About Me

Study of the Discrimination and Hostility

- **Methodology:** Forums Content Analysis



Key Takeaways

- Harassment of women is common; ranges from micro aggressions to rape and death threats; Women report **persistent and normalized experiences of sexism and misogyny.**
- Impact on their well being is real and damaging. Shows individual harm and collective harm (me too).
- Women leave OSS because of this treatment.

Action Items:



- Create and support **Safe spaces** for women
- Create and Enforce customized **Codes of Conduct**
- **Highlight** the profiles of successful women/URMs
- Facilitate **mentoring and networking** opportunities
- Engage women in OSS **governance**

Current Initiatives in the OSS Space

What works and What doesn't ?



Improving Software Developer Diversity and Inclusion

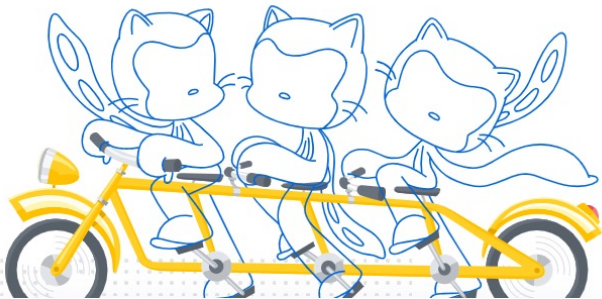
The mission of SDDI is to discover, evaluate, and promote best practices from research and industry to increase diversity and inclusion in software engineering.

More information about SDDI will be available soon.

If you are interested in participating in the project, please email us at info@sddiproject.org



Diversity, inclusion, and belonging at GitHub

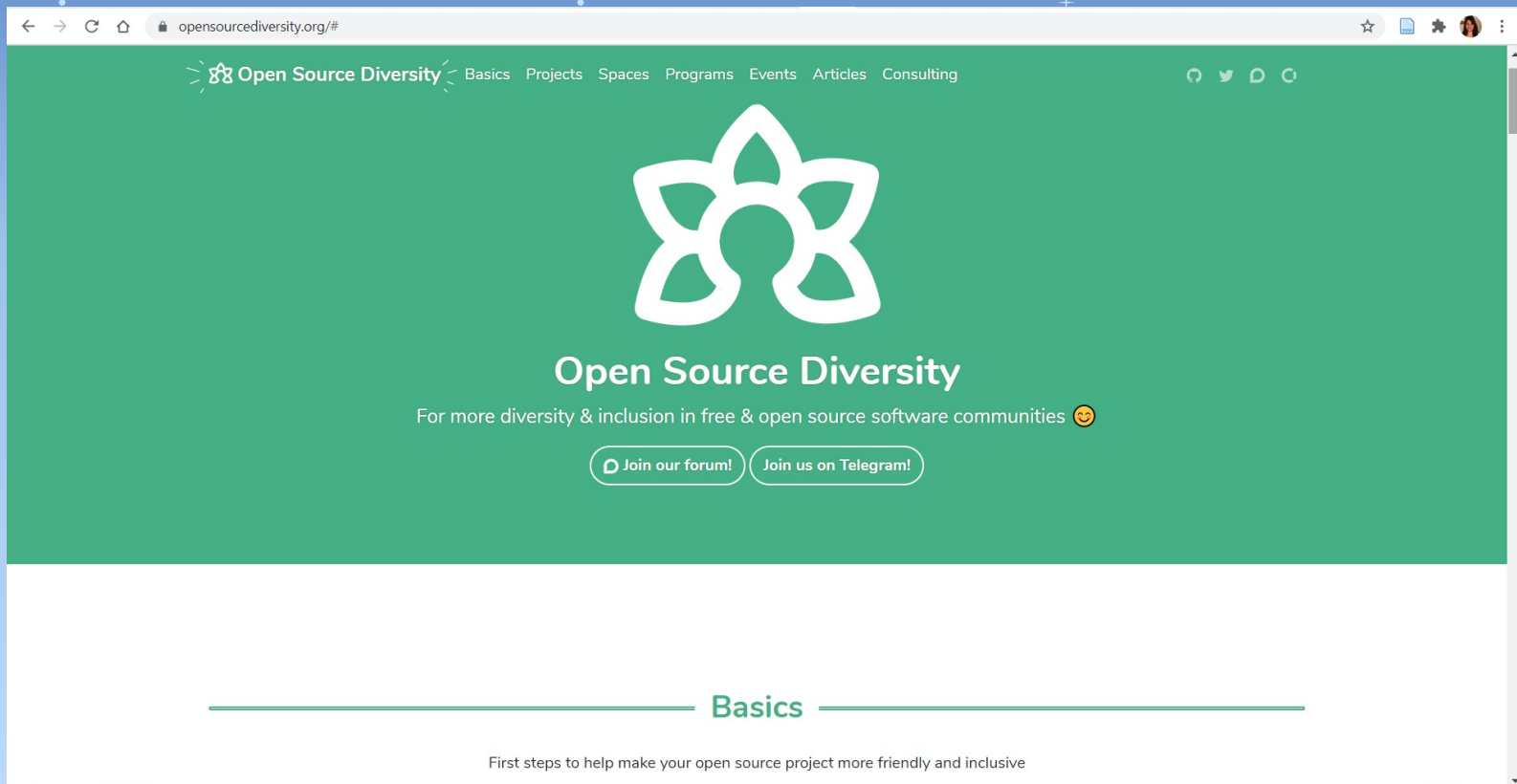


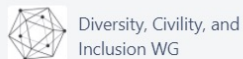
At GitHub, diversity, inclusion, and belonging (DI&B) is both a journey and a commitment. We are grateful for this year of reflection and renewal, and are proud to share our annual Diversity Report.

At GitHub we strive to build the best platform for our interconnected community of developers all over the world. By being globally diverse ourselves, we are an extension of the global developer community, enabling GitHub to be more inclusive and create the sense of belonging that fosters creativity and collaboration, and truly becomes a home.

This year we have significantly increased our investments in Diversity, Inclusion, and Belonging (DI&B) to support our global expansion and achieve our mission to advance human progress through technology. We have implemented a cross







PAGE TREE

- > DCI WG Initiatives
- > Guest Speakers
- > Community Survey
- DRAFT Blog: Hyperledger's Diversity
- > Meeting notes
- DCI Resources and Links
- > 2021 Strategic Priorities

Dashboard

Diversity, Civility, and Inclusion WG Home

Created by David Huseby, last modified by Eduardo Olsson on Jan 31, 2021

Charter

Description	The Hyperledger Diversity, Civility and Inclusion Working Group (DCI) is chartered with measuring and improving the health of our open source community. We seek to provide constructive recommendations to the TSC, projects, and working groups. All are welcome to join us and help Hyperledger continue to grow in a diverse, civil, and inclusive way.
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>>Get Started Here

- ☒ Join our mailing list <https://lists.hyperledger.org/g/dci-wg/editsub>

Scope

For more information about the scope of the group and how to get involved watch this short video.



2021 Themes

Engagement and Partnerships - Nurture the pipeline

Identify Governing Board point persons to join DCI meetings and participate in our activities

Engagement and partnership with outside organizations

1. HBCUs
2. Girls Who Code, etc.
3. Black Girls Who Code <https://www.blackgirlscode.com/>
4. SHE-256
5. Code2040 <http://www.code2040.org/>
6. Blockchain Education Network
7. Bowie State University Blockchain Association
8. Women of Color in Blockchain
9. Women of Color National Policy Network
10. Crypto Queens
11. Caribbean Blockchain Alliance
12. Blacks in Technology <https://training.linuxfoundation.org/announcements/blacks-in-technology-and-the-linux-foundation-partner-to-offer-up-to-100000-in-training-certification-to-deserving-individuals/>
13. Black Women Blockchain Council



About the Inclusive Naming Initiative

The Inclusive Naming Initiative's mission is to help companies and projects remove all harmful and unclear language of any kind and replace it with an agreed-upon set of neutral terms. The initiative's goal is to define processes and tools to remove harmful language from projects. This includes creating a comprehensive list of terms with replacements, language evaluation frameworks and templates, and infrastructure to aid the transition. Red Hat, IBM, LF Networking, and the Kubernetes Naming WG are all already on board.

Goals

We're looking to:

- Provide a consistent set of **language recommendations** in projects
- Recommend **implementation paths** for different use cases
- Provide **tooling** to measure implementation success
- Act as a platform for **community recognition** of organizations actively doing the work

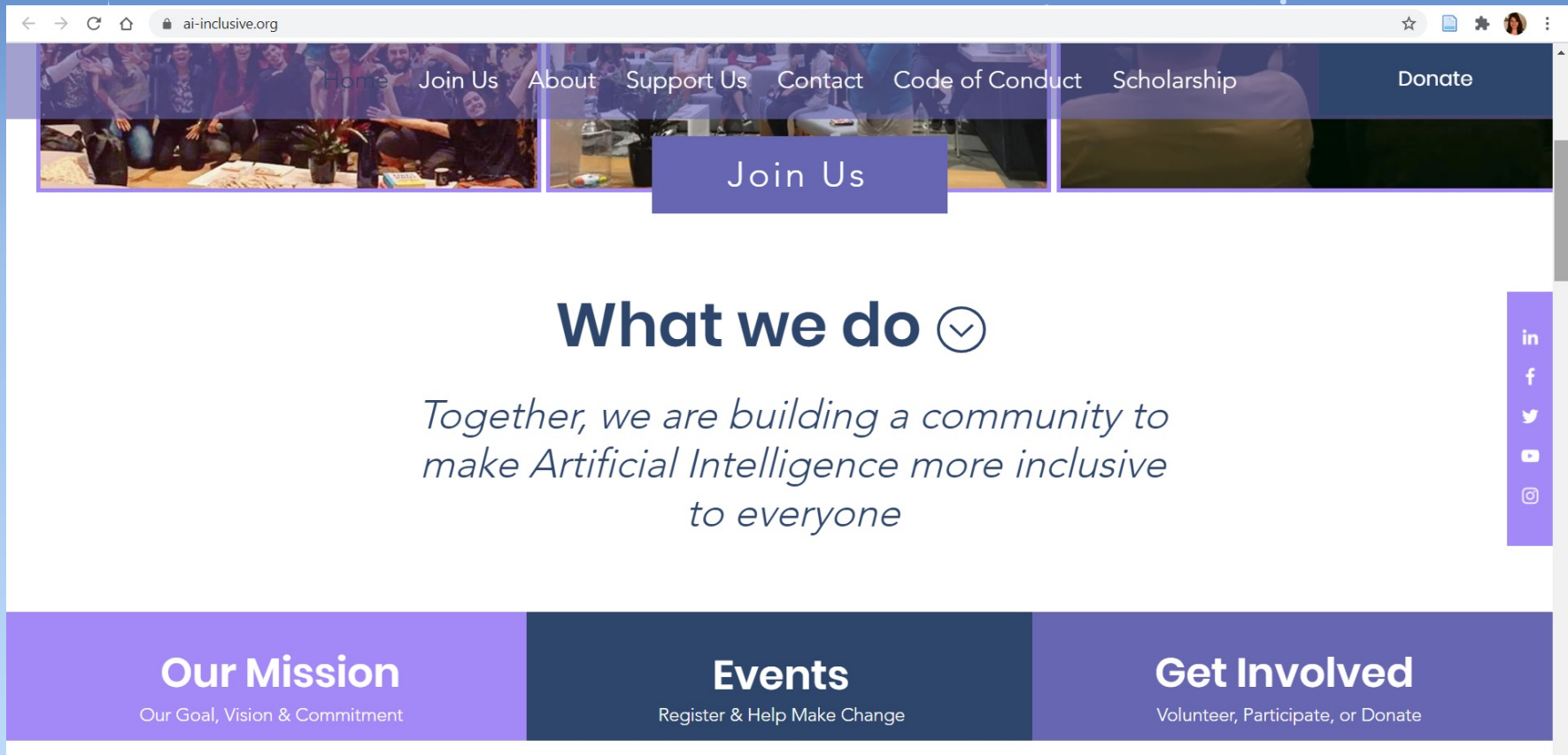
Roadmap

Note: Roadmap is subject to change

- Q1 2021
 - Define best practices and replacements with the community, providing documents and tools for folks to get started

Participating organizations







Outreachy Internships

Outreachy is a diversity initiative that provides paid, remote internships to people subject to systemic bias and impacted by underrepresentation in the technical industry where they are living.

Outreachy provides internships to work on **open source**. Our internships are:


 **Paid** - \$6,000 USD total internship stipend

 **Remote** - both interns and mentors work remotely

 **3 months** - internships run May to August, or December to March

Timeline

Initial applications are closed for the May 2021 internship cohort.

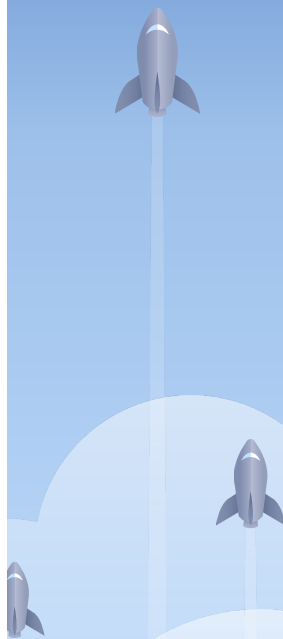
 [Sign up for our mailing list](#) to be notified of future internships. Applications will open in August for the December 2021 cohort. Applications will open in February for the May 2022 cohort.

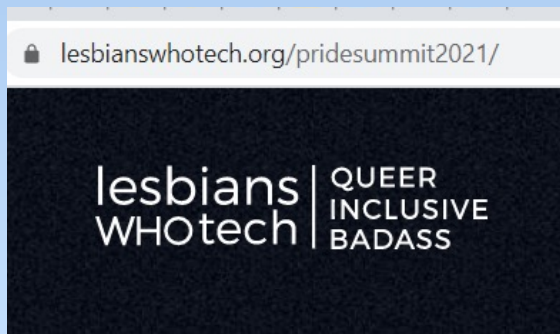
 [Read the Outreachy applicant guide](#) for details on our application schedule.

Work on Open Source

Outreachy interns work with experienced mentors from open source communities. Outreachy internship projects may include programming, user experience, documentation, illustration, graphical design, data science, project marketing, user advocacy, or community event planning.

Supporting Diversity in Open Source





debian
women



Women

Women in Drupal

Other Diversity Initiatives in OSS Jamboard

<https://jamboard.google.com/d/1m3-igoYPeMRpECBxeTbPdFlfyBeqVSzC3ZZHgjaQChg/edit?usp=sharing>

Challenges



Challenges

Lack of Awareness

Lack of Allies

Lack of positive storytelling

Enforcement of Codes of Conduct

Ruthless decisions by Organizations

Lack of Awareness

- About the status of diversity in OSS
- About the value of diversity – measurable impact on the overall value of a brand/product
- About the level of hostility/discrimination/harassment faced by URM
- About the **IMPACT** of this hostility on the careers and well being of URM

Lack of Allies



What can allies do?



Better Allies® @betterallies · May 20, 2020

...

5 ways to sponsor coworkers from underrepresented groups:

- * Speak their name when they aren't around
- * Endorse them publicly
- * Invite them to high-profile meetings
- * Share their career goals with decision-makers
- * Recommend them for stretch assignments and speaking opportunities

5 THINGS ALLIES CAN DO TO SPONSOR COWORKERS FROM UNDERREPRESENTED GROUPS

SPEAK THEIR NAME
WHEN THEY AREN'T
AROUND

ENDORSE
THEM
PUBLICLY

INVITE THEM TO
HIGH-PROFILE
MEETINGS

SHARE THEIR
CAREER GOALS WITH
DECISION-MAKERS

RECOMMEND THEM FOR
STRETCH ASSIGNMENTS AND
SPEAKING OPPORTUNITIES

What can allies do?



Sanjana Hattotuwa ✓
@sanjanah

"And remember... don't be evil, and if you see something that you think isn't right – speak up!" is still in @Google's Code of Conduct abc.xyz/investor/other... @timnitGebru did exactly that. Her fate along with those aligned with her values questions why this line remains. #AI

VIII. Conclusion

Google aspires to be a different kind of company. It's impossible to spell out every possible ethical scenario we might face. Instead, we rely on one another's good judgment to uphold a high standard of integrity for ourselves and our company. We expect all Googlers to be guided by both the letter and the spirit of this Code. Sometimes, identifying the right thing to do isn't an easy call. If you aren't sure, don't be afraid to ask questions of your manager, Legal or Ethics & Compliance.

And remember... don't be evil, and if you see something that you think isn't right – speak up!

Last updated September 25, 2020

"We find that the combination of these strategies allows them to claim identities as allies **without** having to engage in concrete efforts that could challenge systems of oppression. We argue that systematically examining processes through which people construct and perform what it means to be an ally may provide insights into mechanisms whereby inequality is maintained and justified."

<https://academic.oup.com/socpro/article/68/2/358/5809595>

Amplify stories
Raise voice in advocacy
Enforcement of CoC

“VM (Vicky) Brasseur, an award-winning free/open-source advocate and corporate strategist, said, "A little over a year ago I finally joined [@fsf](#)". They had finally taken action against RMS, a man who has not only been demonstrably toxic himself but is also a role model of toxicity in #FreeSoftware. RMS was holding FSF and Free Software back. [Despite that well-known toxicity, FSF announced on Twitter that RMS is returning to its board of directors.](#) Their one step forward in September 2019 converted to two large steps back to the Free Software dark ages."

Ruthless decisions by Organizations

Josh Simmons, president of the [Open Source Initiative \(OSI\)](#), which oversees open-source licenses, tweeted "I am shocked and [appalled by the news out of LibrePlanet that RMS, a known harasser, is returning to the FSF Board.](#)"



Open Source Initiative

Guaranteeing the 'our' in source...

[ABOUT](#) ▾

[LICENSES](#) ▾

[MEMBERSHIP](#) ▾

[COMMUNITY](#) ▾

[RESOURCES](#) ▾

[NEWS & EVENTS](#) ▾

OSI Response to RMS's reappointment to the Board of the Free Software Foundation

Submitted by administrator on Tue, 2021-03-23 10:34

To fully realize the promise of open source, the Open Source Initiative (OSI) is committed to building an inclusive environment where a diverse community of contributors feel welcome. This is clearly not possible if we include those who have demonstrated a pattern of behavior that is incompatible with these goals.

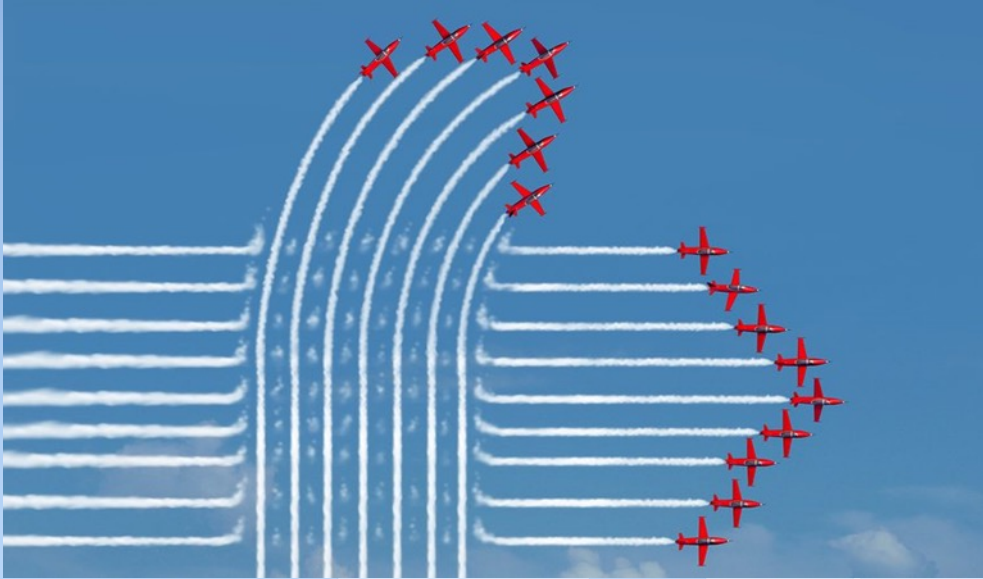
Richard M. Stallman recently announced that he will be returning to the board of directors of the Free Software Foundation (FSF), a statement that the FSF has not denied. We believe it is inappropriate for Stallman to hold any leadership position in the free and open source software community. If we do not speak out against this, our silence may be misinterpreted as support.

The Open Source Initiative calls upon the Free Software Foundation to hold Stallman responsible for past behavior, remove him from the organization's leadership and work to address the harm he caused to all those he has excluded: those he considers less worthy, and those he has hurt with his words and actions. We will not participate in any events that include Richard M. Stallman and we cannot collaborate with the Free Software Foundation until Stallman is removed from the organization's leadership.

A photograph of the Space Shuttle Columbia during its ascent. The shuttle is white with orange solid rocket boosters and a black nose cone. It is launching from a sandy launch complex, with a massive plume of white smoke and fire trailing behind it. The sky is a deep blue with scattered white stars. In the foreground, there are several large, semi-transparent, overlapping circles in shades of blue and white, creating a layered effect. The text "Way Forward" is overlaid in the center in a bold, orange, sans-serif font.

Way Forward

Time for Disruption





My Commitment



- Continue my research so that I can keep publishing empirical evidence to increase awareness
- Providing actionable results for OSS
- Continue introducing my students to OSS
- Developing formal mentorship alliances with OSS communities
- Disseminating my research at diverse venues
- Supporting future development of “safe spaces” for women of OSS

Do something, measure it and then improve upon
it- iterative problem solving



➤ DEI is not a **Big Bang Approach** but consistent
commitment and improvement is needed.

Measuring The Disruption!

Did you succeed?



“What gets measured, get done”

- Define DEI dimensions you will monitor
- Select metrics for Diagnosis:
 - ▷ Representation, Recruitment, Retention, Pay
- Select metrics for tracking progress to prioritize resources
- Select ROI measures to advocate future investment
- Adapt these measures to changes in the environment



Covid
Work from
Home

Measure Diversity, Equity, and Inclusion as a Business Imperative



RECRUITMENT



RETENTION



ADVANCEMENT



REPRESENTATION



PAY

<https://www.bcg.com/capabilities/diversity-inclusion/measuring-diversity-equity-inclusion>

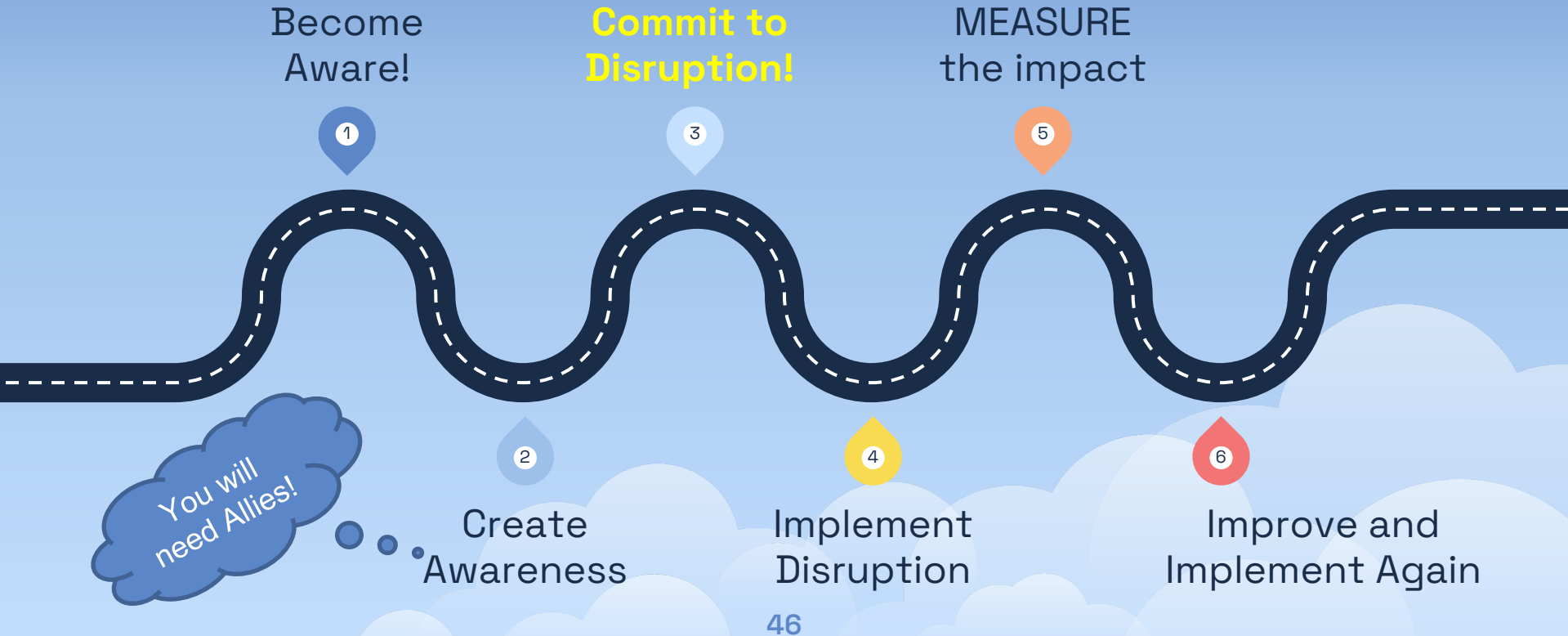
Establish Baseline metrics

Establish Responsibility and Accountability

Publish the results

**Publish your Diversity Report
and Reaffirm your
commitment**

Roadmap for Disruption:





What's your intention?
What's your commitment?

Jamboard Link

Commitment Screenshot

I commit to respect different approaches and individual preferences- does someone prefer to be introduced as 'an engineer' or 'female engineer'?

I commit to stay courageous on my open source journey

I commit to initiate my contributions to OSS and help other women do the same.



I commit to keep listening and learning and connecting to more people, so we have more networks that brings us together worldwide

I commit to talking about my experience with FOSS and Outreachy

share knowledge with other cultures

I will find and offer my support/time to a local community.

Encouraging my teams to expand their hiring pools to increase our hiring diversity so that we can get more diverse contributors in the OSS communities we participate in. - Perry Myers (Red Hat)

I commit to invite women speakers inspire me and fellow female colleagues

I will be more patient/extend more effort to understand people who speak with an accent.

I commit to continue mentoring Outreachy (and similar orgs) interns.

I commit to advocating for myself and other women both in Open Source projects and within my organization.

I commit to help improving the purpose of the women of suricata community; I commit to being involved in initiatives that foster diversity in FOSS, like the Big Open Source Sibling (boss) project

Intentional outreach to women to submit abstracts for conferences. Get their great work exposure and they as well.

I will continue to encourage projects I manage to create Codes of Conducts (some have/some don't).

I commit to executing actions to increase diversity in scientific computing and the scientific Python community

Make loud about goals and participation into organizations without prejudgement or biasing

I will continue to serve on the SDDI.

Investigating setting up safe spaces/communities for our internal teams for women and other URM to foster more inclusion and attracting more diverse talent to join.

Never forgetting my struggles as I continue to mentor and promote DEI at LF and in the Linux kernel. Not forgetting help understand struggles others face in their journeys.

I commit to finding and creating safe spaces for women in OSS (I was not previously aware of this idea)

to create and enhance safe spaces and ally training programs specifically for technical women and men. and get corporate america to improve their workplaces to support women in oss

Advocate for and help develop additional OSS creator royalty streams.

I pledge to seek feedback on how to make my hiring ads more inclusive and inviting to underrepresented groups to create more diversity in my team

I pledge to work to make my activities related to OSS more welcoming to people who are underrepresented and encourage them to get more involved.

I will help OSS communities to create actions to attract and retain women based on the human factors that affect women's decision to join (or leave) OSS.

I pledge to help other women and men in the technical sector for breaking the boundaries of misogyny and other opportunities



Questions?

Thank you!

